Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended June 30, 2024

OR

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

For the transition period from _____ to _____

Commission File Number: 001-38693

Allogene Therapeutics, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**82-3562771**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

210 East Grand Avenue, South San Francisco, California 94080
(Address of principal executive offices including zip code)
Registrant's telephone number, including area code: (650) 457-2700

N/A

(Former name, former address and former fiscal year, if changed since last report)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.001 par value per share	ALLO	The Nasdaq Stock Market LLC

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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	☒	Smaller reporting company	☒
Emerging growth company	☐		

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

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

As of August 2, 2024, the registrant had 209,111,516 shares of common stock, $0.001 par value per share, outstanding.

Table of Contents

PART I: FINANCIAL INFORMATION

Item 1. Financial Statements

ALLOGENE THERAPEUTICS, INC.
Condensed Consolidated Balance Sheets
(Unaudited)
(In thousands, except share and per share amounts)

	June 30, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 170,667	$ 83,155
Short-term investments	273,961	365,542
Prepaid expenses and other current assets	12,496	10,418
Total current assets	457,124	459,115
Operating lease right-of-use asset	58,385	63,703
Property and equipment, net	92,080	99,478
Deposit placed in escrow	21,429	—
Restricted cash	10,292	10,292
Other long-term assets	6,439	6,604
Equity method investments	1,134	3,645
Total assets	$ 646,883	$ 642,837
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 12,936	$ 5,897
Accrued and other current liabilities	24,369	31,182
Total current liabilities	37,305	37,079
Lease liability, noncurrent	86,989	88,346
Other long-term liabilities	7,551	5,179
Total liabilities	131,845	130,604
Commitments and Contingencies (Notes 6 and 7)		
Stockholders' equity:		
Preferred stock, $0.001 par value: 10,000,000 shares authorized as of June 30, 2024 and December 31, 2023; no shares were issued and outstanding as of June 30, 2024 and December 31, 2023	—	—
Common stock, $0.001 par value: 400,000,000 shares authorized as of June 30, 2024 and December 31, 2023; 209,049,485 and 168,642,238 shares issued and outstanding as of June 30, 2024 and December 31, 2023, respectively	209	169
Additional paid-in capital	2,209,200	2,075,252
Accumulated deficit	(1,693,591)	(1,562,233)
Accumulated other comprehensive loss	(780)	(955)
Total stockholders' equity	515,038	512,233
Total liabilities and stockholders' equity	$ 646,883	$ 642,837

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

ALLOGENE THERAPEUTICS, INC.
Condensed Consolidated Statements of Operations and Comprehensive Loss
(Unaudited)
(In thousands, except share and per share amounts)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Collaboration revenue - related party	$ —	$ 22	$ 22	$ 52
Operating expenses:				
Research and development	50,355	62,038	102,614	142,276
General and administrative	16,087	18,524	33,354	37,408
Impairment of long-lived assets	4,989	—	4,989	—
Total operating expenses	71,431	80,562	140,957	179,684
Loss from operations	(71,431)	(80,540)	(140,935)	(179,632)
Other income (expense), net:				
Interest and other income, net	4,988	3,778	10,421	5,837
Other income and expense, net	85	(2,470)	(844)	(5,405)
Total other income (expense), net	5,073	1,308	9,577	432
Net loss	(66,358)	(79,232)	(131,358)	(179,200)
Other comprehensive loss:				
Net unrealized gain on available-for-sale investments	147	2,083	175	6,075
Net comprehensive loss	$ (66,211)	$ (77,149)	$ (131,183)	$ (173,125)
Net loss per share, basic and diluted	$ (0.35)	$ (0.54)	$ (0.73)	$ (1.23)
Weighted-average number of shares used in computing net loss per share, basic and diluted	190,026,638	146,795,826	179,577,500	145,685,993

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

ALLOGENE THERAPEUTICS, INC.
Condensed Consolidated Statements of Stockholders' Equity
(Unaudited)
(In thousands, except share amounts)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount				
Balance - December 31, 2023	168,642,238	$ 169	$ 2,075,252	$ (1,562,233)	$ (955)	$ 512,233
Issuance of common stock upon exercise of stock options and vesting of RSUs	1,551,729	1	793	—	—	794
Vesting of early exercised common stock	—	—	532	—	—	532
Stock-based compensation	—	—	11,924	—	—	11,924
Employee stock purchase plan	259,000	—	856	—	—	856
Net loss	—	—	—	(65,000)	—	(65,000)
Net unrealized gain on available-for-sale investments	—	—	—	—	28	28
Balance - March 31, 2024	170,452,967	170	2,089,357	(1,627,233)	(927)	461,367
Issuance of common stock upon exercise of stock options and vesting of RSU's	415,483	1	18	—	—	19
Stock-based compensation	—	—	13,559	—	—	13,559
Issuance of common stock from ATM offering	250,000	—	1,021	—	—	1,021
Issuance of common stock from registered offering, net of commissions and offering costs of $4.7 million	37,931,035	38	105,245	—	—	105,283
Net loss	—	—	—	(66,358)	—	(66,358)
Net unrealized gain on available-for-sale investments	—	—	—	—	147	147
Balance - June 30, 2024	209,049,485	$ 209	$ 2,209,200	$ (1,693,591)	$ (780)	$ 515,038

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount				
Balance - December 31, 2022	144,438,304	$ 144	$ 1,911,632	$ (1,234,968)	$ (9,926)	$ 666,882
Issuance of common stock upon exercise of stock options and vesting of RSUs	942,276	1	(1)	—	—	—
Vesting of early exercised common stock	—	—	603	—	—	603
Stock-based compensation	—	—	18,770	—	—	18,770
Employee stock purchase plan	359,753	1	1,730	—	—	1,731
Net loss	—	—	—	(99,968)	—	(99,968)
Net unrealized gain on available-for-sale investments	—	—	—	—	3,992	3,992
Balance - March 31, 2023	145,740,333	146	1,932,734	(1,334,936)	(5,934)	592,010
Issuance of common stock from ATM offering, net of commissions and offering costs of $1.6 million	20,288,330	20	87,898	—	—	87,918
Issuance of common stock upon exercise of stock options and vesting of RSUs	1,105,001	1	1,605	—	—	1,606
Vesting of early exercised common stock	—	—	432	—	—	432
Stock-based compensation	—	—	16,594	—	—	16,594
Net loss	—	—	—	(79,232)	—	(79,232)
Net unrealized gain on available-for-sale investments	—	—	—	—	2,083	2,083
Balance - June 30, 2023	167,133,664	$ 167	$ 2,039,263	$ (1,414,168)	$ (3,851)	$ 621,411

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

ALLOGENE THERAPEUTICS, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(In thousands)

	Six Months Ended June 30,	
	2024	**2023**
Cash flows from operating activities:		
Net loss	$ (131,358)	$ (179,200)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	25,483	35,364
Depreciation and amortization	7,199	7,150
Net amortization/accretion on investment securities	(4,998)	(566)
Impairment of long-lived assets	4,989	—
Non-cash rent expense	(151)	357
Non-cash collaboration revenue - related party	(14)	(34)
Share of loss from equity method investments, net	554	5,370
Changes in operating assets and liabilities:		
Deposit placed in escrow	(21,429)	—
Prepaid expenses and other current assets	(1,953)	1,365
Other long-term assets	2,122	(55)
Accounts payable	6,690	(3,233)
Accrued and other current liabilities	(6,670)	5,607
Other long-term liabilities	49	(621)
Net cash used in operating activities	(119,487)	(128,496)
Cash flows from investing activities:		
Purchases of property and equipment	(8)	(1,323)
Proceeds from sales of investments	—	5,623
Proceeds from maturities of investments	220,493	296,309
Purchase of investments	(123,739)	(170,514)
Net cash provided by investing activities	96,746	130,095
Cash flows from financing activities:		
Proceeds from issuance of common stock from ATM offering, net of commissions and issuance costs	1,021	87,918
Proceeds from issuance of common stock from registered offering, net of commissions and issuance costs	105,283	—
Proceeds from CIRM award	2,280	—
Proceeds from issuance of common stock upon exercise of stock options	813	1,606
Proceeds from issuance of common stock under the employee stock purchase plan	856	1,731
Net cash provided by financing activities	110,253	91,255
Net change in cash and cash equivalents and restricted cash	87,512	92,854
Cash and cash equivalents and restricted cash — beginning of period	93,447	72,196
Cash and cash equivalents and restricted cash — end of period	$ 180,959	$ 165,050
Non-cash operating activities:		
Right-of-use asset obtained in exchange for lease liability	$ 2,409	$ —
Non-cash deferred revenue included in other long-term liabilities	$ 3,079	$ 3,122
Supplemental disclosure:		
Cash paid for amounts included in the measurement of lease liabilities	$ (6,173)	$ (5,989)

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

ALLOGENE THERAPEUTICS, INC.
Notes to Condensed Consolidated Financial Statements

1. Description of Business

Allogene Therapeutics, Inc. (the Company or Allogene) was incorporated on November 30, 2017 in the State of Delaware and is headquartered in South San Francisco, California. Allogene is a clinical stage immuno-oncology company pioneering the development of genetically engineered allogeneic T cell product candidates for the treatment of cancer and autoimmune diseases. The Company is developing a pipeline of "off-the-shelf" T cell product candidates that are designed to target and kill cancer cells in patients or eliminate pathogenic autoreactive cells in patients with autoimmune disorders. The Company's engineered T cells are allogeneic, meaning they are derived from healthy donors for intended use in any patient, rather than from an individual patient for that patient's use, as in the case of autologous T cells. The Company believes this key difference will enable it to deliver readily available treatments faster, more reliably, at greater scale, and to more patients.

Registered Offering

On May 13, 2024, the Company entered into (i) an underwriting agreement (Underwriting Agreement) with Goldman Sachs & Co. LLC (Underwriter) and (ii) a Securities Purchase Agreement (Securities Purchase Agreement) with certain members of the Company's Board of Directors and executive officers or their respective affiliates (Purchasers), pursuant to which the Company sold and issued to the Underwriter and the Purchasers an aggregate of 37,931,035 shares of common stock of the Company at a purchase price of $2.90 per share, in a registered offering transaction (Registered Offering) for aggregate gross proceeds of $110.0 million, before deducting the underwriting discount and commissions and estimated offering expenses payable by the Company. The Registered Offering closed on May 16, 2024. The aggregate fee payable by the Company to the Underwriter was $4.7 million, plus the reimbursement of certain expenses. The Purchasers purchased an aggregate of 1,034,484 shares of common stock of the Company in the Registered Offering.

Need for Additional Capital

The Company has sustained operating losses and expects to continue to generate operating losses for the foreseeable future. The Company's ultimate success depends on the outcome of its research and development activities as well as the ability to commercialize the Company's product candidates.

The Company had cash and cash equivalents and investments of $ 444.6 million as of June 30, 2024. Since inception through June 30, 2024, the Company has incurred cumulative net losses of $1,693.6 million. Management expects to incur additional losses in the future to fund its operations and conduct product research and development and recognizes the need to raise additional capital to fully implement its business plan.

The Company intends to raise additional capital through the issuance of equity securities, debt financings or other sources in order to further implement its business plan. However, if such financing is not available at adequate levels, the Company will need to reevaluate its operating plan and may be required to delay the development of its product candidates. The Company expects that its cash and cash equivalents and investments will be sufficient to fund its operations for at least the next 12 months from the date the accompanying unaudited condensed consolidated financial statements are filed with the Securities and Exchange Commission (SEC).

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) for interim financial information and pursuant to Form 10-Q and Article 10 of Regulation S-X of the SEC. Accordingly, they do not include all of the information and footnotes required by GAAP for complete consolidated financial statements. In the Company's opinion, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair presentation of the results of operations and cash flows for the periods presented have been included. The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Allogene Therapeutics, B.V. The subsidiary was dissolved on January 3, 2024.

The condensed consolidated balance sheet as of June 30, 2024, the condensed consolidated statements of operations and comprehensive loss for the three and six months ended June 30, 2024 and 2023, the condensed consolidated statements of

stockholders' equity as of June 30, 2024 and 2023, the condensed consolidated statements of cash flows for the six months ended June 30, 2024 and 2023, and the financial data and other financial information disclosed in the notes to the condensed consolidated financial statements are unaudited. The results of operations for the three and six months ended June 30, 2024 are not necessarily indicative of the results to be expected for the year ending December 31, 2024, or for any other future annual or interim period. These condensed consolidated financial statements should be read in conjunction with the Company's audited financial statements and related notes for the year ended December 31, 2023, included in the Company's Annual Report on Form 10-K filed with the SEC on March 14, 2024.

Use of Estimates

The preparation of condensed consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the condensed consolidated financial statements and the reported amounts of expenses during the reporting period. Significant estimates and assumptions made in the accompanying condensed consolidated financial statements include but are not limited to the fair value of common stock, the fair value of stock options, the fair value of investments, income tax uncertainties, and certain accruals. The Company evaluates its estimates and assumptions on an ongoing basis using historical experience and other factors and adjusts those estimates and assumptions when facts and circumstances change. Actual results could differ from those estimates.

Significant Accounting Policies

There have been no significant changes to the accounting policies during the three and six months ended June 30, 2024, as compared to the significant accounting policies described in Note 1 of the "Notes to Financial Statements" in the Company's audited financial statements included in its Annual Report, with exception of the following.

California Institute for Regenerative Medicine (CIRM) Award

Accounting for the CIRM award does not fall under ASC 606, Revenue from Contracts and Customers, as CIRM does not meet the definition of a customer. No income associated with the CIRM award will be recognized until it is confirmed with CIRM that the award does not require repayment. Until then such award will be recognized, along with any interest, as a long-term liability upon cash receipt. See Note 5 below for more details.

Recently Adopted Accounting Pronouncements

There have been no new accounting pronouncements issued or effective that are expected to have a material impact on the Company's condensed consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

The Company continues to monitor new accounting pronouncements issued by the FASB and does not believe any accounting pronouncements issued through the date of this report will have a material impact on the Company's condensed consolidated financial statements.

3. Fair Value Measurements

The Company measures and reports its cash equivalents, restricted cash, and investments at fair value.

Money market funds are measured at fair value on a recurring basis using quoted prices and are classified as Level 1. Investments are measured at fair value based on inputs other than quoted prices that are derived from observable market data and are classified as Level 2 inputs, except for investments in U.S. treasury securities which are classified as Level 1.

There were no Level 3 assets or liabilities as of June 30, 2024 and as of December 31, 2023.

Financial assets subject to fair value measurements on a recurring basis and the level of inputs used in such measurements by major security type as of June 30, 2024 and as of December 31, 2023 are presented in the following tables:

	June 30, 2024			
	Level 1	Level 2	Level 3	Fair Value
	(In thousands)			
Financial Assets:				
Money market funds (1)	$ 161,543	$ —	$ —	$ 161,543
Commercial paper	—	4,945	—	4,945
Corporate bonds	—	104,841	—	104,841
U.S. treasury securities	127,041	—	—	127,041
U.S. agency securities	—	37,134	—	37,134
Total financial assets	$ 288,584	$ 146,920	$ —	$ 435,504

	December 31, 2023			
	Level 1	Level 2	Level 3	Fair Value
	(In thousands)			
Financial Assets:				
Money market funds (1)	$ 78,536	$ —	$ —	$ 78,536
Corporate bonds	—	97,166	—	97,166
U.S. treasury securities	229,516	—	—	229,516
U.S. agency securities	—	38,860	—	38,860
Total financial assets	$ 308,052	$ 136,026	$ —	$ 444,078

(1) Included within cash and cash equivalents on the Company's condensed consolidated balance sheets .

4. Financial Instruments

The fair value and amortized cost of cash equivalents and available-for-sale securities by major security type as of June 30, 2024 and as of December 31, 2023 are presented in the following tables:

	June 30, 2024			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(In thousands)			
Money market funds	$ 161,543	$ —	$ —	$ 161,543
Commercial paper	4,949	—	(4)	4,945
Corporate bonds	104,953	9	(121)	104,841
U.S. treasury securities	127,187	—	(146)	127,041
U.S. agency securities	37,208	—	(74)	37,134
Total cash equivalents and investments	$ 435,840	$ 9	$ (345)	$ 435,504
Classified as:				
Cash equivalents				$ 161,543
Short-term investments				273,961
Long-term investments				—
Total cash equivalents and investments				$ 435,504

	December 31, 2023			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(In thousands)			
Money market funds	$ 78,536	$ —	$ —	$ 78,536
Corporate bonds	97,265	113	(212)	97,166
U.S. treasury securities	229,563	132	(179)	229,516
U.S. agency securities	39,225	—	(365)	38,860
Total cash equivalents and investments	$ 444,589	$ 245	$ (756)	$ 444,078
Classified as:				
Cash equivalents				$ 78,536
Short-term investments				365,542
Long-term investments				—
Total cash equivalents and investments				$ 444,078

As of June 30, 2024, the remaining contractual maturities of available-for-sale securities were less than 1 year. There were no significant realized losses on available-for-sale securities for the three and six months ended June 30, 2024. Realized losses on available-for-sale securities for the three and six months ended June 30, 2023 were zero and $1.0 million, respectively. As of June 30, 2024, unrealized losses on available-for-sale securities are not attributed to credit risk. The Company believes that it is more likely than not that investments in an unrealized loss position will be held until maturity and all interest and principal will be received. The Company believes that an allowance for credit losses is unnecessary because the unrealized losses on certain of the Company's available-for-sale securities are due to market factors. As of June 30, 2024 and December 31, 2023, securities with a fair value of $17.7 million and $48.4 million, respectively, were in a continuous net unrealized loss position for more than 12 months. To date, the Company has not recorded any impairment charges on available-for-sale securities.

As of June 30, 2024 and December 31, 2023, the Company recognized $ 2.0 million and $1.7 million, respectively, of accrued interest receivable from available-for-sale securities within prepaid expenses and other current assets on the condensed consolidated balance sheets.

5. Balance Sheet Components

Property and Equipment, Net

Property and Equipment consist of the following:

	June 30, 2024	December 31, 2023
	(In thousands)	
Leasehold improvements	107,655	108,621
Laboratory equipment	31,953	33,157
Computer equipment and purchased software	4,663	4,663
Furniture and fixtures	4,171	4,121
Total	148,442	150,562
Less: accumulated depreciation	(56,362)	(51,084)
Total property and equipment, net	$ 92,080	$ 99,478

The Company has determined it operates in a single operating segment and has one reportable segment. The Company reviews for indicators of impairment on quarterly basis which include the change in how its property is being used.

In June 2024, the Company made a decision to sublease one of its leased buildings in South San Francisco. The Company vacated and ceased occupancy of this building in June 2024 and currently the Company is actively marketing the leased building for sublease. In connection with the preparation of these condensed consolidated financial statements, the

Company determined that the change in how this building is being used could indicate impairment. The Company identified this to be sublet property as a separate asset group for purposes of long-lived asset impairment assessment. The Company concluded that the carrying value of this to be sublet property asset group was not recoverable and the estimated fair value of this asset group was below its carrying value. The lower fair value of this asset group was mainly due to the lower estimated sublease income compared to the lease payments in accordance with the initial operating lease agreement and higher discount rate. The Company applied a discounted cash flow method to estimate fair value of its right-of-use asset and leasehold improvements. Based on this analysis, the Company concluded the fair value of the right-of-use asset and leasehold improvements of $2.5 million was lower than its net book value of $ 7.5 million. The Company recognized a pre-tax long-lived asset impairment charge of $5.0 million on the right-of-use asset and leasehold improvements for the three and six months ended June 30, 2024.

The determination of the fair value of the Company's asset group related to the to be sublet property that is currently being marketed for sublease purposes represents a Level 3 nonrecurring fair value measurement. Calculating the fair value of the asset involves significant estimates and assumptions. These estimates and assumptions include, among other things, expected sublease rental income of $4.0 million and risk-adjusted annual discount rate of 9%. Changes in the factors and assumptions used could materially affect the amount of impairment loss recognized in the period the asset was considered impaired.

Accrued and Other Current Liabilities

On January 4, 2024, the Company's Board of Directors approved a reduction in the Company's workforce of approximately 22% of the Company's employees in connection with the Company's pipeline prioritization and clinical development strategy. The reduction in workforce was completed by June 30, 2024. During the six months ended June 30, 2024, the Company paid approximately $2.8 million for severance and other employee benefits. As of June 30, 2024, $0.3 million of the severance and other employee benefits accrual was included in accrued and other current liabilities on the condensed consolidated balance sheet.

CIRM Award

On April 26 2024, the Company was awarded $15.0 million from CIRM to support the clinical development of ALLO-316, an AlloCAR T ™ investigational product targeting CD70 in development for the treatment of advanced or metastatic renal cell carcinoma (RCC).

Pursuant to terms of the award, the disbursements are tied to the achievement of specified operational milestones. In addition, the terms of the award include a co-funding requirement pursuant to which the Company is required to spend up to approximately $25.9 million of its own capital to fund the CIRM funded research project. The award was made in accordance with the CIRM Grants Administration Policy for Clinical Stage Projects which may require the award to be repaid by the Company. Under the terms of the CIRM award, the Company is obligated to pay royalties based on a low single digit royalty percentage on net sales of CIRM-funded product candidate. The maximum royalty that the Company may be required to pay to CIRM is equal to nine times the total amount awarded and paid to the Company.

After completing the CIRM funded research project and at any time after the award period end date (but no later than the ten-year anniversary of the date of the award), the Company has the right, upon its election, to convert the award into a loan. The terms of conversion into a loan will be determined based on various factors and could result in 80% to 100% plus interest at 10% per annum plus the Secured Overnight Financing Rate of the total award dependent upon the phase of clinical development of the product candidate at the time of the Company's election to be repaid to CIRM.

No income associated with the CIRM award will be recognized until it is confirmed with CIRM that the award does not require repayment. Upon cash receipt, the CIRM award and accrued interest will be recognized as other long-term liabilities on the Company's balance sheet.

The Company received $2.3 million from CIRM through June 30, 2024 and accounted for the proceeds as a liability within other long-term liabilities on the condensed consolidated balance sheet.

6. License and Collaboration Agreements

Asset Contribution Agreement with Pfizer

In April 2018, the Company entered into an Asset Contribution Agreement (the Pfizer Agreement) with Pfizer pursuant to which the Company acquired certain assets, including certain contracts and intellectual property for the development and administration of chimeric antigen receptor (CAR) T cells for the treatment of cancer. The Company is required to make milestone payments upon successful completion of regulatory and sales milestones on a target-by-target basis for the targets, including CD19 and B-cell maturation antigen (BCMA), covered by the Pfizer Agreement. The aggregate potential milestone payments upon successful completion of various regulatory milestones in the United States and the European Union are $30.0 million or $60.0 million, depending on the target, with aggregate potential regulatory and development milestones of up to $840.0 million. The aggregate potential milestone payments upon reaching certain annual net sales thresholds in North America, Europe, Asia, Australia and Oceania (the Territory) for a certain number of targets covered by the Pfizer Agreement are $325.0 million per target. The sales milestones in the foregoing sentence are payable on a country-by-country basis until the last to expire of any Pfizer Royalty Term, as described below, for any product in such country in the Territory. In October 2019, the Territory was expanded to all countries in the world. No milestone or royalty payments were made in the three and six months ended June 30, 2024 or 2023.

Pfizer is also eligible to receive, on a product-by-product and country-by-country basis, royalties in single-digit percentages on annual net sales for products covered by the Pfizer Agreement. The Company's royalty obligation with respect to a given product in a given country begins upon the first sale of such product in such country and ends on the later of (i) expiration of the last claim of any applicable patent or (ii) 12 years from the first sale of such product in such country.

Research Collaboration and License Agreement with Cellectis

As part of the Pfizer Agreement, Pfizer assigned to the Company a Research Collaboration and License Agreement (the Original Cellectis Agreement) with Cellectis S.A. (Cellectis). On March 8, 2019, the Company entered into a License Agreement (the Cellectis Agreement) with Cellectis. In connection with the execution of the Cellectis Agreement, on March 8, 2019, the Company and Cellectis also entered into a letter agreement (the Letter Agreement), pursuant to which the Company and Cellectis agreed to terminate the Original Cellectis Agreement. The Original Cellectis Agreement included a research collaboration to conduct discovery and pre-clinical development activities to generate CAR T cells directed at targets selected by each party, which was completed in June 2018.

Pursuant to the Cellectis Agreement, Cellectis granted to the Company an exclusive, worldwide, royalty-bearing license, on a target-by-target basis, with sublicensing rights under certain conditions, under certain of Cellectis's intellectual property, including its TALEN and electroporation technology, to make, use, sell, import, and otherwise exploit and commercialize CAR T products directed at certain targets, including BCMA, CD70, Claudin 18.2, DLL3 and FLT3 (the Allogene Targets), for human oncologic therapeutic, diagnostic, prophylactic and prognostic purposes. In addition, certain Cellectis intellectual property rights granted by Cellectis to the Company and to Servier pursuant to the Exclusive License and Collaboration Agreement by and between Servier and Pfizer, dated October 30, 2016, which Pfizer assigned to the Company in April 2018, will survive the termination of the Original Cellectis Agreement.

Pursuant to the Cellectis Agreement, the Company granted Cellectis a non-exclusive, worldwide, royalty-free, perpetual and irrevocable license, with sublicensing rights under certain conditions, under certain of the Company's intellectual property, to make, use, sell, import and otherwise commercialize CAR T products directed at certain targets (the Cellectis Targets).

The Cellectis Agreement provides for development and sales milestone payments by the Company of up to $ 185.0 million per product that is directed against an Allogene Target, with aggregate potential development and sales milestone payments totaling up to $2.8 billion. Cellectis is also eligible to receive tiered royalties on annual worldwide net sales of any products that are commercialized by the Company that contain or incorporate, are made using or are claimed or covered by, Cellectis intellectual property licensed to the Company under the Cellectis Agreement (the Allogene Products), at rates in the high single-digit percentages. Such royalties may be reduced, on a licensed product-by-licensed product and country-by-country basis, for generic entry and for payments due under licenses of third party patents. Pursuant to the Cellectis Agreement, and subject to certain exceptions, the Company is required to indemnify Cellectis against all third party claims related to the development, manufacturing, commercialization or use of any Allogene Product or arising out of the Company's material breach of the representations, warranties or covenants set forth in the Cellectis Agreement, and Cellectis is required, subject to certain exceptions, to indemnify the Company against all third party claims related to the development, manufacturing, commercialization or use of CAR T products directed at Cellectis Targets or arising out of Cellectis's material breach of the representations, warranties or covenants set forth in the Cellectis Agreement.

The royalties are payable, on a licensed-product-by-licensed-product and country-by-country basis, until the later of (i) the expiration of the last to expire of the licensed patents covering such product; (ii) the loss of regulatory exclusivity

afforded such product in such country, and (iii) the tenth anniversary of the date of the first commercial sale of such product in such country; however, in no event shall such royalties be payable, with respect to a particular licensed product, past the twentieth anniversary of the first commercial sale for such product.

Depending on the Cellectis Target, the Company has a right of first refusal or right of first negotiation to purchase or license from Cellectis rights to develop and commercialize products against such Cellectis Targets.

Under the Cellectis Agreement, the Company has certain diligence obligations to progress the development of CAR T product candidates and to commercialize one CAR T product per Allogene Target in one major market country where the Company has received regulatory approval. If the Company materially breaches any of its diligence obligations and fails to cure within 90 days, then with respect to certain targets, such target will cease to be an Allogene Target and instead will become a Cellectis Target.

Unless earlier terminated in accordance with its terms, the Cellectis Agreement will expire on a product-by-product and country-by-country basis, upon expiration of all royalty payment obligations with respect to such licensed product in such country. The Company has the right to terminate the Cellectis Agreement at will upon 60 days' prior written notice, either in its entirety or on a target-by-target basis. Either party may terminate the Cellectis Agreement, in its entirety or on a target-by-target basis, upon 90 days' prior written notice in the event of the other party's uncured material breach. The Cellectis Agreement may also be terminated by the Company upon written notice at any time in the event that Cellectis becomes bankrupt or insolvent or upon written notice within 60 days of a consummation of a change of control of Cellectis.

All costs the Company incurred in connection with this agreement were recognized as research and development expenses in the condensed consolidated statements of operations. For the three and six months ended June 30, 2024 and 2023, no clinical development milestones were achieved.

Exclusive License Agreement with Servier

As part of the Pfizer Agreement, Pfizer assigned to the Company an Exclusive License Agreement (the Original Servier Agreement), with Les Laboratoires Servier SAS and Institut de Recherches Internationales Servier SAS (collectively, Servier) to develop, manufacture and commercialize certain allogeneic anti-CD19 CAR T cell product candidates, including UCART19, in the United States with the option to obtain the rights over additional anti-CD19 product candidates and for allogeneic CAR T cell product candidates directed against one additional target. In October 2019, the Company agreed to waive its rights to the one additional target.

Under the Original Servier Agreement, the Company has an exclusive license to develop, manufacture and commercialize licensed products directed against CD19, including UCART19, ALLO-501 and cemacabtagene ansegedleucel (cema-cel, previously ALLO-501A) (collectively, CD19 Products) in the field of anti-tumor adoptive immunotherapy in the United States, with an exclusive option to obtain the same rights for additional product candidates in the United States and, if Servier does not elect to pursue development or commercialization of those product candidates in certain markets outside of the United States pursuant to its license, outside of the United States as well. The Company is not required to make any additional payments to Servier to exercise an option. If the Company opts-in to another product candidate, Servier has the right to obtain rights to such product candidate outside the United States and to share development costs for such product candidate.

On May 10, 2024, the Company and Servier entered into an Amendment and Settlement Agreement with Servier (the Servier Amendment) which restructured the parties' relationship under the Original Servier Agreement (as amended, the Servier Agreement). The Company's licensed territory was expanded to include the European Union and the United Kingdom. The Company was also granted an option to further extend its licensed territory to include China and Japan upon the objective showing of sufficient resources to develop licensed products in those countries, which could be met through the Company entering into a strategic partnership covering those countries. Additionally, the Company agreed to waive certain of its rights under the Original Servier Agreement to elect a conversion of its license to the CD19 Products to a worldwide license. Under the Servier Agreement, the Company is required to use commercially reasonable efforts to develop, manufacture and commercialize a CD19 Product.

Under the Servier Agreement, Servier sublicenses to the Company certain rights which Servier licenses from Cellectis pursuant to a first development and commercialization agreement, dated February 7, 2014, by and between Cellectis and Servier (as amended, the Servier-Cellectis Agreement). As amended by the Servier Amendment, all of the Company's future milestone payments (regulatory and sales) under the Original Servier Agreement were modified to be the same as, and to coincide with, Servier's milestone payments to Cellectis that are required under the Servier-Cellectis Agreement. The Servier

Agreement provides for aggregate potential milestone payments by the Company to Servier of up to € 75.0 million upon successful completion of various regulatory milestones and first commercial sale milestones in the United States, European Union and the United Kingdom for the initial indication of each licensed product, of which €60.0 million remains for the initial indication for cema-cel, with additional payments of € 55.0 million, due for each subsequent indication, of which €50.0 million remains for the first subsequent indication for cema-cel, and aggregate potential payments by the Company to Servier of up to €80.0 million upon achievement of certain net sales milestones for each licensed product. Should Servier's rights and obligations under the Servier-Cellectis Agreement be assigned to the Company, these milestone payments would terminate, and the Company would assume Servier's milestone payment obligation to Cellectis. In the absence of any such assignment, Servier will remain responsible for making milestone payments that may be due to Cellectis under the Servier-Cellectis Agreement.

The Company transferred €20.0 million into an escrow account in connection with a potential future milestone payment, which is included in the remaining €60.0 million in milestone payments referenced above for the initial indication for cema-cel. Such milestone payment will be triggered, if at all, upon the occurrence of one of these events: (1) the Company doses the first subject in its first phase 3 clinical study for a CD19 CAR-T product that is a licensed product under the Servier Agreement, (2) the Company submits a phase 2 clinical study for a licensed product to the U.S. Food and Drug Administration or the European Medicines Agency, and such phase 2 clinical study is accepted for regulatory approval as a pivotal study, or (3) a final and definitive decision of a tribunal or court finding that under the Servier-Cellectis Agreement the milestone has occurred and the €20.0 million payment is due to Cellectis.

The Company is obligated to pay to Servier royalties on annual net sales of any licensed products that are commercialized by the Company that is directed at CD19. Such royalties include tiered royalties on annual net sales in the United States and a flat royalty on annual net sales in territories outside the United States. The United States royalty rates are in a range from the low tens to the mid teen percentages, and the ex-U.S. royalty rate is 10%. Such royalties may be reduced for interchangeable drug entry, expiration of patent rights and amounts paid pursuant to licenses of third-party patents. This royalty obligation begins upon the first commercial sale of such product in a given country and ends after the later of a defined number of years or the expiration of the last to expire licensed patent covering the product in such country. The net effect of the Servier Amendment is that the Company's royalty rate in the United States for the first half of the first tier of net sales was increased by a low single digit percentage as compared to the Original Servier Agreement. Should Servier's rights and obligations under the Servier-Cellectis Agreement be assigned to the Company, each tier of royalty rates in the United States to Servier would be reduced by 10%, the ex-U.S. royalties to Servier would terminate, and the Company would assume Servier's royalty obligations to Cellectis. In the absence of any such assignment, Servier will remain responsible for making royalty payments that may be due to Cellectis under the Servier-Cellectis Agreement.

The parties agreed that co-development performed by the Company and Servier under the Servier Agreement, including all development performed by Servier and for product candidates that the Company was co-developing with Servier (for which specified development costs were split under the Original Servier Agreement with the Company responsible for 60% and Servier responsible for 40%), including the CD19 Products, ceased as of December 15, 2022, and that all development costs incurred by either party after that date shall be borne solely by such party.

The parties agreed to waive any and all outstanding claims that were asserted relating to alleged violations of the Original Servier Agreement, including all claims that such party was entitled to various payments or refunds from the other party under the Original Servier Agreement, and any and all claims that either party now has or may have in the future related to such outstanding claims, and mutual releases with respect to such claims were granted.

The Company will recognize expense related to the revised milestones and royalties when payments become probable. There was no gain or loss related to the expanded license territories and ceased Servier co-development.

For the three and six months ended June 30, 2024 and 2023, the Company recorded $ 5.4 million and zero, respectively, in research and development expenses upon achievement of a regulatory milestone. As of June 30, 2024, the Company recorded €20.0 million as deposit placed in escrow in the condensed consolidated balance sheets.

Research Collaboration and License Agreement with Notch Therapeutics

On November 1, 2019, the Company entered into a Collaboration and License Agreement (the Notch Agreement) with Notch Therapeutics Inc. (Notch), pursuant to which Notch granted to Allogene an exclusive, worldwide, royalty-bearing, sublicensable license under certain of Notch's intellectual property to develop, make, use, sell, import, and otherwise commercialize therapeutic gene-edited T cell and/or natural killer (NK) cell products from induced pluripotent stem cells directed at certain CAR targets for initial application in non-Hodgkin lymphoma, acute lymphoblastic leukemia and multiple

myeloma. In addition, Notch has granted Allogene an option to add certain specified targets to its exclusive license in exchange for an agreed per-target option fee.

The Notch Agreement includes a research collaboration to conduct research and pre-clinical development activities to generate engineered cells directed to Allogene's exclusive targets, which will be conducted in accordance with an agreed research plan and budget under the oversight of a joint development committee. Allogene will reimburse Notch's costs incurred in accordance with such plan and budget. The term of the research collaboration will expire upon the earlier of (i) the fifth anniversary of the date of the Notch Agreement, (ii) at Allogene's election, following the joint development committee's determination that for each exclusive target, Notch has met certain success criteria, or (iii) the joint development committee's determination that the research collaboration cannot be reasonably pursued against any exclusive target due to technical infeasibility or safety issues.

In connection with the execution of the Notch Agreement, Allogene made an upfront payment to Notch of $ 10.0 million in return for a license to access Notch's technology in order to conduct research pursuant to the Notch Agreement. In addition, Allogene made a $5.0 million investment in Notch's series seed convertible preferred stock, resulting in Allogene having a 25% ownership interest in Notch's outstanding capital stock on a fully diluted basis immediately following the investment. In connection with this investment, an Allogene representative served on the Notch Board of Directors. In February 2021, the Company made an additional $15.9 million investment in Notch's Series A preferred stock. In October 2021, the Company made an additional $ 1.8 million investment in Notch's common stock. Immediately following this transaction, the Company's share in Notch was 23% on a voting interest basis. On May 17, 2024, Notch closed a Series B preferred stock financing with a combination of new and existing investors (Notch Series B Financing). The Company did not participate in the Notch Series B Financing but received Series B preferred stock as part of its anti-dilution rights. Immediately following this transaction, the Company's share in Notch was 13%. In connection with the Notch Series B Financing, the Company waived its right to appoint one member of the Notch board of directors, but retained board observation rights. The Company no longer has any significant influence over Notch and as a result of the decrease in ownership and influence, accounted for its investment in Notch as an equity investment measured at cost less any impairment effective May 17, 2024.

Under the Notch Agreement, Notch will be eligible to receive up to $ 7.25 million upon achieving certain agreed research milestones, up to $ 4.0 million per exclusive target upon achieving certain pre-clinical development milestones, and up to $283.0 million per exclusive target and cell type (i.e., T cell or NK cell) upon achieving certain clinical, regulatory and commercial milestones. Notch is also entitled to receive tiered royalties in the mid to high single digit range on Allogene's sales of licensed products, subject to certain reductions, for a term, on a country-by-country and product-by-product basis, commencing on first commercial sale of such product in such country and continuing until the latest of (i) the date upon which there is no valid claim of the licensed patents in such country of sale that covers such product, (ii) the expiration of applicable data or other regulatory exclusivity in such country of sale or (iii) a defined period from the first commercial sale of such product in such country.

The terms of the Notch Agreement will continue on a product-by-product and country-by-country basis until Allogene's payment obligations with respect to such product in such country have expired. Following such expiration, Allogene's license with respect to such product and country shall be perpetual, irrevocable, fully paid up and royalty-free. Allogene may terminate the Collaboration Agreement in whole or on a product-by-product basis upon ninety days' prior written notice to Notch. Either party may also terminate the Collaboration Agreement with written notice upon material breach by the other party, if such breach has not been cured within a defined period of receiving such notice, or in the event of the other party's insolvency.

On January 25, 2024, the Company entered into an Amended and Restated Collaboration and License Agreement (the Amended Notch Agreement) with Notch. The Amended Notch Agreement amends and restates the Notch Agreement. Under the Amended Notch Agreement, the Company has relinquished its exclusive rights to all original CAR targets (the Released Targets) except for one CAR target, and has agreed to limit its option right to only one additional CAR target. If the option is exercised, the Company will have a minimum funding commitment for the overall development program. If Notch subsequently out-licenses any of the Released Targets, the Company will be entitled to receive a percentage of upfront and/or milestone payments associated therewith up to a set cap of $30.0 million, and will be entitled to a low, single-digit royalty on net sales of products containing a Released Target. In addition, with respect to the Company's previous equity investment in Notch, the Amended Notch Agreement grants the Company certain anti-dilution protections up to certain limits for certain pre-IPO equity financings. As of June 30, 2024, no Released Targets were out-licensed by Notch. On May 17, 2024, in connection with the Notch Series B Financing the Company waived certain of its anti-dilution rights in exchange for a low single digit percentage reduction in the royalty rate for the royalties the Company is obliged to pay to Notch under our Notch intellectual property license should the Company commercialize a licensed product.

For the three and six months ended June 30, 2024, the Company recorded zero collaboration costs. For the three and six months ended June 30, 2023, the Company recorded $0.8 million and $1.8 million, respectively, in collaboration costs as research and development expenses. No milestones were achieved by Notch for the three and six months ended June 30, 2024 and 2023. As of June 30, 2024, the Company's equity investment in Notch was $2.0 million (see Note 8).

Strategic Alliance with The University of Texas MD Anderson Cancer Center

On October 6, 2020, the Company entered into a strategic five-year collaboration agreement with The University of Texas MD Anderson Cancer Center (MD Anderson) for the preclinical and clinical investigation of allogeneic CAR T cell product candidates. The Company and MD Anderson are collaborating on the design and conduct of preclinical and clinical studies with oversight from a joint steering committee.

Under the terms of the agreement, the Company has committed up to $ 15.0 million of funding for the duration of the agreement. Payment of this funding is contingent on mutual agreement to study orders in order for any study to be included under the alliance. The Company made an upfront payment of $3.0 million to MD Anderson in the year ended December 31, 2020 and made an additional upfront payment of $ 3.0 million to MD Anderson in the year ended December 31, 2023. The Company is obligated to make further payments to MD Anderson each year upon the anniversary of the agreement effective date through the duration of the agreement term. These costs are expensed to research and development as MD Anderson renders the services under the strategic alliance.

The agreement may be terminated by either party for material breach by the other party. Individual studies may be terminated for, among other things, material breach, health and safety concerns or where the institutional review board, the review board at the clinical site with oversight of the clinical study, requests termination of any study. Where any legal or regulatory authorization is finally withdrawn or terminated, the relevant study will also terminate automatically.

For the three and six months ended June 30, 2024, the Company recorded $ 0.3 million in collaboration costs as research and development expenses. For the three and six months ended June 30, 2023, the Company recorded $0.6 million and $1.0 million, respectively, in collaboration costs as research and development expenses.

Investment in and License Agreement with Overland Therapeutics, Inc.

On May 24, 2024, the Company, Overland Pharmaceuticals (CY) inc. (Overland), and Allogene Overland Biopharm (CY) Limited (Allogene Overland) entered into a Share Exchange Agreement (Share Exchange Agreement) pursuant to which Overland's cell therapy business merged into Allogene Overland (the Organizational Restructuring).

Under the Share Exchange Agreement, Allogene Overland acquired from Overland a 100% equity interest in Overland Pharmaceuticals (US) Inc. (Overland US). Overland US includes certain research and development, clinical, and general and administrative staff, as well as select cell therapy assets, including its lead program, OL-101, an autologous GPRC5D-BCMA bispecific dual targeting CAR-T for refractory multiple myeloma. Upon completion of the closing of the share exchange, Overland US became a wholly owned subsidiary of Allogene Overland, Overland's ownership increased to 82% and the Company's ownership decreased to 18%. Under a separate agreement between Overland and HH BioPharma Holdings Ltd. (HBP) executed on May 24, 2024, Overland distributed all Series Seed Preferred Shares of Allogene Overland held by Overland to HBP and HBP has assumed all rights and obligations attached to such shares and all rights and obligations of Overland under the Share Exchange Agreement.

As part of the Organizational Restructuring, Allogene Overland was renamed Overland Therapeutics Inc. (Overland Therapeutics).

On December 14, 2020, the Company entered into a License Agreement (License Agreement) with Allogene Overland, a joint venture established by the Company and Overland, pursuant to a Share Purchase Agreement (Share Purchase Agreement), dated December 14, 2020, for the purpose of developing, manufacturing and commercializing certain allogeneic CAR T cell therapies for patients in greater China, Taiwan, South Korea and Singapore (the JV Territory).

Pursuant to the Share Purchase Agreement, the Company acquired Seed Preferred Shares in Allogene Overland representing 49% of Allogene Overland's outstanding stock as partial consideration for the License Agreement, and Overland acquired Seed Preferred Shares representing 51% of Allogene Overland's outstanding stock for $117.0 million in upfront and certain quarterly cash payments, to support operations of Allogene Overland. As of May 24, 2024, the Company and Overland were the sole equity holders in Allogene Overland. The Company received $40.0 million from Allogene Overland as partial consideration for the License Agreement.

Pursuant to the License Agreement, the Company granted Allogene Overland an exclusive license to develop, manufacture and commercialize certain allogeneic CAR T cell candidates directed at four targets, BCMA, CD70, FLT3, and DLL3 (Overland Licensed Products), in the JV Territory. As consideration, the Company would also be entitled to additional regulatory milestone payments of up to $40.0 million and, subject to certain conditions, tiered low-to-mid single-digit sales royalties. Subsequent to entering into the License Agreement, Allogene Overland assigned the License Agreement to a wholly-owned subsidiary, Allogene Overland BioPharm (HK) Limited (Allogene Overland HK). On April 1, 2022, Allogene Overland HK assigned the License Agreement to Allogene Overland Biopharm (PRC) Co., Limited (Allogene Overland PRC).

Promises that the Company concluded were distinct performance obligations in the License Agreement included: (1) the license of intellectual property and delivery of know-how, (2) the manufacturing license, related know-how and support, (3) know-how developed in future periods, and (4) participation in the joint steering committee.

In order to determine the transaction price, the Company evaluated all the consideration to be received over the duration of the contract. Fixed consideration exists in the form of the upfront payment and Seed Preferred Shares in Allogene Overland. Regulatory milestones and royalties were considered variable consideration. The Company constrains the estimated variable consideration when it assesses it is probable that a significant reversal in the amount of cumulative revenue recognized may occur in future periods. Milestone fees were constrained and not included in the transaction price due to the uncertainties of research and development. The Company re-evaluates the transaction price, including the estimated variable consideration included in the transaction price and all constrained amounts, in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

The Company estimated the fair value of the shares of Seed Preferred Stock at $ 79.0 million, using probability adjusted future cash infusions based on the upfront and certain quarterly cash payments of $117.0 million committed by Overland. The probability for the future quarterly cash payments of 65% was developed based on consideration of the Company's expectations for future cash infusions from Overland and was applied on a cumulative basis for each quarterly payment. The present value of the future quarterly cash payments was estimated using 11.9% annual discount rate. The fair value measurement is based on significant inputs not observable in the market and, therefore, represents a Level 3 measurement.

The Company determined that the initial transaction price consists of the upfront payment of $ 40.0 million and noncash consideration of $ 79.0 million received in the form of the shares of Seed Preferred Stock. The allocation of the transaction price is performed based on standalone selling prices, which are based on estimated amounts that the Company would charge for a performance obligation if it were sold separately. The initial transaction price of $119.0 million was allocated as follows: (i) $114.0 million to the license of intellectual property and delivery of know-how, which was recognized upon grant of license and delivery of know-how in the consolidated financial statements for the year ended December 31, 2021 when the know-how was delivered; (ii) $2.3 million to the manufacturing license, related know-how and support, which will be recognized as services are delivered; (iii) $2.1 million to the know-how developed in future periods, which will be recognized as services are delivered, and (iv) $0.6 million to participation in the joint steering committee, which will be recognized over time as the services are delivered. Funds received in advance are recorded as deferred revenue and will be recognized as the performance obligations are satisfied.

In connection with the Organizational Restructuring, on May 24, 2024, the Company and Allogene Overland PRC, entered into a First Amendment to the License Agreement (the License Amendment) to amend and supplement certain provisions of the License Agreement. Under the License Amendment, the Company continues to grant Allogene Overland PRC an exclusive license to develop, manufacture, and commercialize the Licensed Products in the JV Territory, with the Company retaining exclusive rights to the Licensed Products outside the JV Territory, and the royalty obligations to the Company were amended to a flat mid single-digit royalty on net sales in the JV Territory that are no longer subject to reductions. The License Amendment also provides the Company with additional rights to terminate the License Agreement in its entirety or with respect to the relevant Overland Licensed Products if Allogene Overland PRC fails to initiate manufacturing technology transfer with respect to an Overland Licensed Product as agreed in the License Amendment, or if HBP commits a funding default or a material breach of its representations, warranties, or covenants under the Share Exchange Agreement. The License Amendment also provides that the License Agreement will terminate automatically if the Company's ownership in Allogene Overland falls below 7.5% (other than due to the Company's sale of the shares of Allogene Overland), unless at that time Allogene Overland PRC and the Company have mutually agreed on the manufacturing technology transfer plan for the Overland Licensed Products and Allogene Overland PRC elects to continue the license for such Overland Licensed Products with increased milestones and royalties. Under the License Amendment terms such increased milestones and royalties consist of up to $115.0 million in milestone payments for each Overland Licensed Product and tiered mid single-digit to low double-digit royalties on net sales in the JV Territory.

The Company determined that the remaining transaction price based on the License Amendment was $ 4.6 million and it was allocated as follows: (i) $1.9 million to the manufacturing license, related know-how and support, which will be recognized as services are delivered and (ii) $ 2.7 million to the know-how developed in future periods, which will be recognized as services are delivered. As of June 30, 2024, $4.6 million of deferred revenue was recorded in other long-term liabilities.

The Company determined that Overland Therapeutics is a variable interest entity as of June 30, 2024 and December 31, 2023. The Company does not have the power to direct the activities which most significantly affect Overland Therapeutics' economic performance. Accordingly, the Company did not consolidate Overland Therapeutics because the Company determined that it was not the primary beneficiary. After the Organizational Restructuring, the Company has 20% voting rights of Overland Therapeutics' board of directors. The Company concluded that it has significant influence over Overland Therapeutics and continued to account for its investment in Overland Therapeutics as an equity method investment. In connection with the Organizational Restructuring, the Company recorded an increase in its equity method investment in Overland Therapeutics and corresponding gain of $1.1 million. The Company's total equity investment in Overland Therapeutics as of June 30, 2024 and December 31, 2023 was $1.1 million and zero, respectively (see Note 8). For the three and six months ended June 30, 2024 and 2023, the Company recognized less than $0.1 million of collaboration revenue.

Collaboration and License Agreement with Antion

On January 5, 2022, the Company entered into an exclusive collaboration and global license agreement (Antion Collaboration and License Agreement) with Antion Biosciences SA (Antion) for Antion's miRNA technology (miCAR), to advance multiplex gene silencing as an additional tool to develop next generation allogeneic CAR T products. Pursuant to the agreement, Antion will exclusively collaborate with the Company on oncology products for a defined period. The Company will also have exclusive worldwide rights to commercialize products incorporating Antion technology developed during the collaboration.

The Antion Collaboration and License Agreement includes an exclusive research collaboration to conduct research and development of the use of Antion's proprietary technologies to produce certain products for a defined period, which will be conducted in accordance with an agreed research plan and budget under the oversight of a joint steering committee. The Company will reimburse Antion's costs incurred in accordance with such plan and budget.

In connection with the execution of the Antion Collaboration and License Agreement, the Company made an upfront payment to Antion of $ 3.5 million in return for a license to access Antion's technology in order to conduct research pursuant to the agreement. The upfront payment was fully recognized as research and development expense as the license had no foreseeable alternative future use. In addition, the Company made a $3.0 million investment in Antion's preferred stock. The Company accounts for its investment in Antion's preferred stock as an equity investment measured at cost less any impairment. In connection with this investment, a Company representative was appointed to Antion's Board of Directors.

In July 2023, the Company and Antion entered into an amendment to the Antion Collaboration and License Agreement. Under the terms of this amendment, Antion's exclusivity obligation relating to the collaboration was terminated; however, Antion agreed to certain restrictions on its ability to pursue products directed against specific targets. Also, in lieu of the Company's prior obligation to make a $3.0 million investment in Antion following the completion of certain milestones, the Company agreed to make a $2.0 million investment in Antion's preferred stock and acquired warrants to purchase an additional $ 3.0 million of Antion's preferred stock.

Under the Antion Collaboration and License Agreement, Antion will be eligible to receive up to $ 35.3 million for four products upon achievement of certain development and regulatory milestones. For each additional product, Antion will be eligible to receive $2.0 million upon achievement of a regulatory milestone. Antion is also entitled to receive a low single-digit royalty on the Company's sales of licensed products, subject to certain reductions.

For the three and six months ended June 30, 2024, the Company recorded zero research and development expenses related to collaboration costs. For the three and six months ended June 30, 2023, the Company recorded $1.3 million and $1.8 million, respectively, in research and development expenses related to collaboration costs. As of June 30, 2024 and December 31, 2023, the Company's total equity investment in Antion was zero.

Strategic Collaboration Agreement with Foresight Diagnostics

On January 3, 2024, the Company entered into a Strategic Collaboration Agreement with Foresight Diagnostics, Inc. (Foresight Diagnostics) (the Foresight Agreement). Pursuant to the Foresight Agreement, the parties have agreed to collaborate

on a non-exclusive basis in the development of Foresight Diagnostics' minimal residual disease (MRD) assay based on their PhasED-Seq Circulating Tumor DNA Platform as an in vitro diagnostic to identify the MRD+ patient population to be enrolled in the Company's ALPHA3 trial of cema-cel, for treatment of large B cell lymphoma. Under the Foresight Agreement, the Company has agreed to use its commercially reasonable efforts to obtain regulatory approval of cema-cel, and Foresight Diagnostics has agreed to use its commercially reasonable efforts to obtain regulatory approval of its MRD assay for use as an in vitro diagnostic with cema-cel. The Company has agreed to fund approximately $26.2 million in MRD assay development costs, milestone payments for regulatory submissions and assay utilization to process clinical samples.

For the three and six months ended June 30, 2024, the Company recorded $ 1.7 million and $2.2 million, respectively, of research and development expenses related to clinical trials start readiness milestone.

7. Commitments and Contingencies

Leases

In August 2018, the Company entered into an operating lease agreement (HQ Lease) for office and laboratory space which consists of approximately 68,000 square feet located in South San Francisco, California. The lease term was 127 months beginning August 2018 through February 2029 with an option to extend the term for seven years which was not reasonably assured of exercise. The Company has made certain tenant improvements, including the addition of laboratory space, and has received $5.0 million of tenant improvement allowances through December 31, 2020. The rent payments began on March 1, 2019 after an abatement period. In December 2021, the Company amended its lease agreement to lease an additional 47,566 square feet of office and laboratory space in South San Francisco, California, as part of the same building as the Company's current headquarters. The lease term commenced in April 2022 and is for a period of 120 months. The rent payments for the expansion premises began in August 2022 after an abatement period. The lease term for the existing premises was also extended and the lease for both the existing and expansion premises will expire on March 31, 2032 with an option to extend the term for eight years which is not reasonably assured of exercise.

In October 2018, the Company entered into an operating lease agreement for office and laboratory space which consists of 14,943 square feet located in South San Francisco, California. The lease term was 124 months beginning November 2018 through February 2029, with an option to extend the term for another seven years which was not reasonably assured of exercise. The Company has made certain tenant improvements, including the upgrading of current office and laboratory space with a lease incentive allowance of $0.8 million. Rent payments began in November 2018. In December 2021, the Company amended its lease agreement to extend the term of the lease to be co-terminus with the HQ Lease. The lease term will expire on March 31, 2032 with an option to extend the term for eight years which is not reasonably assured of exercise.

In February 2019, the Company entered into a lease agreement for approximately 118,000 square feet of space to develop a cell therapy manufacturing facility in Newark, California. The lease term is 188 months and began in November 2020. Upon certain conditions, the Company has two ten-year options to extend the lease, both of which are not reasonably assured of exercise. The Company has received $ 3.0 million of tenant improvement allowances for costs related to the design and construction of certain Company improvements.

In February 2023, the Company entered into a sublease with Bellco Capital Advisors Inc. (Bellco) for 2,218 square feet of office space in Los Angeles, California. The sublease term is 115 months, subject to certain early termination rights. The sublease commenced on January 1, 2024.

The Company maintains letters of credit for the benefit of landlords which is disclosed as restricted cash in the condensed consolidated balance sheets. Restricted cash related to letters of credit due to landlords was $6.0 million as of June 30, 2024 and December 31, 2023.

The balance sheet classification of our lease liabilities were as follows (in thousands):

	June 30, 2024	December 31, 2023
Operating lease liabilities		
Current portion included in accrued and other current liabilities	$ 7,221	$ 6,775
Long-term portion of lease liabilities	86,989	88,346
Total operating lease liabilities	$ 94,210	$ 95,121

The components of lease costs for operating leases, which were recognized in operating expenses, were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Operating lease cost	$ 3,011	$ 3,175	$ 6,031	$ 6,356
Variable lease cost	508	672	1,375	1,363
Total lease costs	$ 3,519	$ 3,847	$ 7,406	$ 7,719

Cash paid for amounts included in the measurement of lease liabilities for the six months ended June 30, 2024 was $ 6.2 million and was included in net cash used in operating activities in the Company's condensed consolidated statements of cash flows.

The undiscounted future non-cancellable lease payments under the Company's operating leases as of June 30, 2024 were as follows:

Year ending December 31:	(In thousands)
2024 (remaining 6 months)	$ 6,382
2025	12,920
2026	13,163
2027	13,612
2028	14,076
2029 and thereafter	65,386
Total undiscounted lease payments	125,539
Less: Present value adjustment	(31,329)
Total	$ 94,210

Operating lease liabilities are based on the net present value of the remaining lease payments over the remaining lease term. In determining the present value of lease payments, the Company uses its estimated incremental borrowing rate. The weighted average discount rate used to determine the operating lease liability was 6.24%. As of June 30, 2024, the weighted average remaining lease term for our operating leases is 8.58 years.

Other Commitments

In July 2020, the Company entered into a Solar Power Purchase and Energy Services Agreement for the installation and operation of a solar photovoltaic generating system and battery energy storage system at the Company's cell therapy manufacturing facility in Newark, California. The agreement has a term of 20 years and commenced in September 2022. The Company is obligated to pay for electricity generated from the system at an agreed rate for the duration of the agreement term. Termination of the agreement by the Company will result in a termination payment due of approximately $4.3 million. In connection with the agreement, the Company maintains a letter of credit for the benefit of the service provider in the amount of $4.3 million which is recorded as restricted cash in the condensed consolidated balance sheets as of June 30, 2024 and December 31, 2023.

The Company has entered into certain license agreements for intellectual property which is used as part of its development and manufacturing processes. Each of these respective agreements are generally cancellable by the Company. These agreements require payment of annual license fees and may include conditional milestone payments for achievement of specific research, clinical and commercial events, and royalty payments. The timing and likelihood of any significant conditional milestone payments or royalty payments becoming due was not probable as of June 30, 2024.

The Company enters into contracts in the normal course of business that includes arrangements with clinical research organizations, vendors for preclinical research and vendors for manufacturing. These agreements generally allow for cancellation with notice. As of June 30, 2024, the Company had non-cancellable purchase commitments of $0.7 million.

8. Equity Method Investments

Notch Therapeutics

In conjunction with the execution of the Notch Agreement (see Note 6), the Company also entered into a Share Purchase Agreement with the Company acquiring shares of Notch's Series Seed convertible preferred stock for a total investment cost of $5.1 million which includes transaction costs of $0.1 million, resulting in a 25% ownership interest in Notch. In February 2021, the Company made a $ 15.9 million investment in Notch's Series A preferred stock. Immediately following this transaction, the Company's share in Notch was 20.7% on a voting interest basis. In October 2021, the Company made an additional $1.8 million investment in Notch's common stock. Immediately following this transaction, the Company's share in Notch was 23.0% on a voting interest basis. On May 17, 2024, Notch closed the Notch Series B Financing which caused the Company's share in Notch to decrease to 13.0% immediately following this transaction.

Accordingly, effective May 17, 2024, the Company started to account for its investment in Notch as an equity investment measured at cost less impairment. The Company's total equity investment in Notch as of June 30, 2024 was $2.0 million. The Company's total equity investment in Notch as of December 31, 2023 was $3.6 million and the Company accounted for the investment using the equity method of accounting. For the quarter to date and year to date periods through May 17, 2024, the Company recognized its share of Notch's net loss of $0.8 million and $1.7 million, respectively, under the other income and expense, net caption within the condensed consolidated statements of operations. For the three and six months ended June 30, 2023, the Company recognized its share of Notch's net loss of $1.2 million and $2.9 million, respectively, under the other income and expense, net caption within the condensed consolidated statements of operations.

Overland Therapeutics, Inc.

In conjunction with the execution of the License Agreement with Allogene Overland (see Note 6), the Company also entered into the Share Purchase Agreement and a Shareholders' Agreement with the joint venture company acquiring shares of Allogene Overland's Seed Preferred Shares representing a 49% ownership interest in exchange for entering into a License Agreement. Upon completion of the Organizational Restructuring, Overland's ownership in Allogene Overland increased to 82% and the Company's ownership decreased to 18%. As part of the Organizational Restructuring, Overland distributed all Series Seed Preferred Shares of Allogene Overland held by Overland to HBP and Allogene Overland was renamed to Overland Therapeutics.

The Company's total equity investment in Overland Therapeutics as of June 30, 2024 and December 31, 2023 was $ 1.1 million and zero, respectively, and the Company accounted for the investment using the equity method of accounting. For the three and six months ended June 30, 2024, the Company recognized its gain from the Organizational Restructuring of $1.1 million under the other income and expense, net caption within the condensed consolidated statements of operations. For the three and six months ended June 30, 2023, the Company recognized its share of Overland Therapeutics' net loss of $1.2 million and $2.5 million, respectively, under the other income and expense, net caption within the condensed consolidated statement of operations.

9. Stock-Based Compensation

In June 2018, the Company adopted its 2018 Equity Incentive Plan (Prior 2018 Plan). The Prior 2018 Plan provided for the Company to sell or issue common stock or restricted common stock, or to grant incentive stock options or nonqualified stock options for the purchase of common stock, to employees, members of the Company's Board of Directors and consultants of the Company under terms and provisions established by the Company's Board of Directors. In September 2018, the Board of Directors adopted a new amended and restated 2018 Equity Incentive Plan as a successor to and continuation of the Prior 2018 Plan, which became effective in October 2018 (the 2018 Plan), which authorized additional shares for issuance and provided for an automatic annual increase to the number of shares issuable under the 2018 Plan by an amount equal to 5% of the total number of shares of common stock outstanding on December 31st of the preceding calendar year. The term of any stock option granted under the 2018 Plan cannot exceed 10 years. The Company generally grants stock-based awards with service conditions only. Options granted typically vest over a four-year period but may be granted with different vesting terms. Restricted Stock Units granted typically vest annually over a four-year period but may be granted with different vesting terms. Options shall not have an exercise price less than 100% of the fair market value of the Company's common stock on the grant date. If the individual possesses more than 10% of the combined voting power of all classes of stock of the Company, the exercise price shall not be less than 110% of the fair market value of a common share of stock on the date of grant. This requirement is applicable to incentive stock options only.

As of June 30, 2024, there were 9,817,735 shares reserved by the Company under the 2018 Plan for the future issuance of equity awards.

Stock Option Exchange Program

On June 21, 2022, the Company commenced an offer to exchange certain eligible options held by eligible employees of the Company for new options (the Exchange Offer). The Exchange Offer expired on July 19, 2022. Pursuant to the Exchange Offer, 199 eligible holders elected to exchange, and the Company accepted for cancellation, eligible options to purchase an aggregate of 3,666,600 shares of the Company's common stock, representing approximately 93.5% of the total shares of common stock underlying the eligible options. On July 19, 2022, immediately following the expiration of the Exchange Offer, the Company granted new options to purchase 3,666,600 shares of common stock, pursuant to the terms of the Exchange Offer and the 2018 Plan. The exercise price of the new options granted pursuant to the Exchange Offer was $13.31 per share, which was the closing price of the common stock on the Nasdaq Global Select Market on the grant date of the new options. The new options are subject to a new three-year vesting schedule, vesting in equal annual installments over the vesting term. Each new option has a maximum term of seven years.

The exchange of stock options was treated as a modification for accounting purposes. The incremental expense of $ 5.2 million for the modified options was calculated using a lattice option pricing model. The incremental expense and the unamortized expense remaining on the exchanged options as of the modification date are being recognized over the new three-year service period.

Stock Option Activity

The following summarizes option activity under the 2018 Plan:

	Outstanding Options			
	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contract Term	Aggregate Intrinsic Value
			(in years)	(in thousands)
Balance, December 31, 2023	21,812,946	$ 9.93	7.53	$ 662
Options granted	5,643,898	3.12	9.06	
Options exercised	(357,993)	2.27		$ 597
Options forfeited	(3,076,605)	11.15		
Balance, June 30, 2024	24,022,246	$ 8.29	7.90	$ 22
Exercisable, June 30, 2024	16,834,976	$ 9.74	7.52	$ 19
Vested and expected to vest, June 30, 2024	24,022,246	$ 8.29	7.90	$ 22

The aggregate intrinsic values of options outstanding, exercisable, vested and expected to vest were calculated as the difference between the exercise price of the options and the closing price of the Company's common stock on the Nasdaq Global Select Market on June 30, 2024. For the six months ended June 30, 2024, the estimated weighted-average grant-date fair value of employee options granted was $2.08 per share. As of June 30, 2024, there was $48.2 million of unrecognized stock-based compensation related to unvested stock options, which is expected to be recognized over a weighted-average period of 2.2 years.

The fair value of employee, consultant and director stock option awards was estimated at the date of grant using a Black-Scholes option-pricing model with the following assumptions:

	Six Months Ended June 30,	
	2024	2023
Expected term in years	5.27 - 6.08	5.27 - 6.08
Expected volatility	72.85% - 73.50%	73.37% - 73.85%
Expected risk-free interest rate	3.94% - 4.32%	3.45% - 4.10%
Expected dividend	0%	0%

Restricted Stock Unit Activity

The following summarizes restricted stock unit activity under the 2018 Plan:

	Outstanding Restricted Stock Units			
	Restricted Stock Units	Weighted-Average Grant Date Fair Value per Share	Weighted Average Remaining Vesting Life	Aggregate Intrinsic Value
			(in years)	(in thousands)
Unvested December 31, 2023	12,180,471	$ 6.68	2.00	$ 39,099
Granted	4,566,042	4.25	1.52	
Vested	(1,572,790)	9.27		
Forfeited	(2,050,309)	7.96		
Unvested June 30, 2024	13,123,414	$ 5.32	1.76	$ 30,578
Vested and expected to vest, June 30, 2024	13,123,414	$ 5.32	1.76	$ 30,578

As of June 30, 2024, there was $44.4 million of unrecognized stock-based compensation related to unvested restricted stock units, which is expected to be recognized over a weighted-average period of 2.3 years.

As of June 30, 2024, the Company had 2,403,260 outstanding performance-based restricted stock units and 1,814,134 outstanding restricted stock units with a market condition granted to certain executive officers and other employees pursuant to the 2018 Plan, including 4,347 performance-based restricted stock units granted in the quarter ended June 30, 2024. These awards are subject to the holders' continuous service to the Company through each applicable vesting event. Through June 30, 2024, the Company believes that the achievement of the requisite performance conditions for these awards are not probable. As a result, no compensation expense has been recognized related to the performance-based restricted stock units for the three and six months ended June 30, 2024 and 2023. The Company recognized $0.7 million and $1.4 million in stock-based compensation expense related to the restricted stock units with a market condition for the three and six months ended June 30, 2024, respectively. The Company recognized $0.8 million and $0.9 million in stock-based compensation expense related to the restricted stock units with market condition for the three and six months ended June 30, 2023, respectively.

Stock-based compensation expense

For the three and six months ended June 30, 2024, the Company recorded $ 13.6 million and $25.5 million, respectively, of stock-based compensation expense related to stock options, restricted stock units and employee stock purchase plans as research and development and general and administrative expense in its condensed consolidated statements of operations and comprehensive loss. For the three and six months ended June 30, 2023, the Company recorded $16.6 million and $35.4 million, respectively, of stock-based compensation expense related to stock options, restricted stock units and employee stock purchase plans as research and development and general and administrative expense in its condensed consolidated statements of operations and comprehensive loss.

10. Related Party Transactions

Collaboration Revenue and Equity Method Investment

In December 2020, the Company entered into the License Agreement with Allogene Overland, a corporate joint venture entity and related party (see Note 6). The License Agreement was subsequently assigned to a wholly-owned subsidiary of Allogene Overland, Allogene Overland HK. On April 1, 2022, Allogene Overland HK assigned the License Agreement to Allogene Overland PRC. On May 24, 2024, the License Agreement was amended. During the three months ended June 30, 2024 and 2023, the Company recognized zero and less than $0.1 million of collaboration revenue under this arrangement, respectively. During the six months ended June 30, 2024 and 2023, the Company recognized less than $0.1 million of collaboration revenue under this arrangement.

For the three and six months ended June 30, 2024, the Company recognized its gain from the Organizational Restructuring of $ 1.1 million under the other income and expense, net caption within the condensed consolidated statements of operations (see Note 8). For the three and six months ended June 30, 2023, the Company recognized its share of Overland Therapeutics' net loss of $1.2 million and $2.5 million, respectively, under the other income and expense, net caption within the condensed consolidated statement of operations.

Sublease Agreement

In December 2018, the Company entered into a sublease with Bellco Capital LLC for 1,293 square feet of office space in Los Angeles, California for a three year term. On April 1, 2020, Bellco assumed all rights, title, interests and obligations under the sublease from Bellco Capital LLC. In November 2021, the sublease was extended to June 30, 2025. The sublease was amended, effective in July 2022, to move to a nearby location, with office space of 737 square feet. The Company's executive chairman, Arie Belldegrun, M.D., FACS, is a trustee of the Belldegrun Family Trust, which controls Bellco. In 2023, the Company exercised its early termination right under the sublease agreement and the sublease was terminated effective December 31, 2023.

In February 2023, the Company entered into a new sublease agreement with Bellco for 2,218 square feet of office space in Los Angeles, California. The sublease term is 115 months, subject to certain early termination rights. The sublease commenced on January 1, 2024. The total right of use asset and associated lease liability recorded related to this related party lease was $2.5 million as of June 30, 2024. For the three and six months ended June 30, 2024, the Company recorded $0.1 million and $0.2 million of rent expense related to this lease, respectively.

Consulting Agreements

In June 2018, the Company entered into a services agreement with Two River Consulting, LLC (Two River), a firm affiliated with the Company's President and Chief Executive Officer, the Company's Executive Chair of the board of directors, and a director of the Company to provide various managerial, clinical development, administrative, accounting and financial services to the Company. In December 2023, the service agreement between the Company and Two River was terminated. The costs incurred for services provided under this agreement were $0.1 million and $0.2 million for the three and six months ended June 30, 2023, respectively.

In August 2018, the Company entered into a consulting agreement with Bellco Capital LLC. Pursuant to the consulting agreement, Bellco Capital LLC provides certain services for the Company, which are performed by Dr. Belldegrun, the Company's executive chair, and inc lude without limitation, providing advice and analysis with respect to the Company's business, business strategy and potential opportunities in the field of allogeneic CAR T cell therapy and any other aspect of the CAR T cell therapy business as the Company may agree. In consideration for these services, the Company paid Bellco Capital LLC $40,217 per month in arrears commencing January 2022. The Company may also, at its discretion, pay Bellco Capital LLC an annual performance award in an amount up to 60% of the aggregate compensation payable to Bellco Capital LLC in a calendar year. The Company also reimburses Bellco Capital LLC for out of pocket expenses incurred in performing the services. The costs incurred for services provided, bonus, and out-of-pocket expenses incurred under this consulting agreement were $0.2 million and $0.4 million for the three and six months ended June 30, 2024, respectively, and $ 0.2 million and $0.4 million for the three and six months ended June 30, 2023, respectively.

11. Income Taxes

The Company has a history of losses and expects to record a loss in 2024. The Company continues to maintain a full valuation allowance against its net deferred tax assets.

12. Net Loss Per Share

The following outstanding potentially dilutive shares have been excluded from the calculation of diluted net loss per share for the period presented due to their anti-dilutive effect:

	June 30,	
	2024	2023
Stock options to purchase common stock	24,022,246	21,943,774
Restricted stock units subject to vesting	13,123,414	12,833,995
Expected shares to be purchased under Employee Stock Purchase Plan	1,088,167	1,749,295
Early exercised stock options subject to future vesting	—	82,051
Total	38,233,827	36,609,115

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

You should read the following discussion of our financial condition and results of operations in conjunction with our unaudited condensed consolidated financial statements and the related notes and other financial information included elsewhere in this Quarterly Report on Form 10-Q (Quarterly Report) and the audited financial statements and notes thereto as of and for the year ended December 31, 2023 and the related Management's Discussion and Analysis of Financial Condition and Results of Operations, both of which are contained in our Annual Report on Form 10-K for the year ended December 31, 2023 (Annual Report), which was filed with the Securities and Exchange Commission (SEC) on March 14, 2024. Unless the context requires otherwise, references in this Quarterly Report to the "Company", "Allogene," "we," "us" and "our" refer to Allogene Therapeutics, Inc., and references to "Servier" collectively refer to Les Laboratoires Servier SAS and Institut de Recherches Internationales Servier SAS.

In addition to historical financial information, this discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth in the section titled "Risk Factors" under Part II, Item 1A below. In some cases, you can identify forward-looking statements by terminology such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potentially," "predict," "should," "will" or the negative of these terms or other similar expressions.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Quarterly Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

Overview

We are a clinical stage immuno-oncology company pioneering the development of genetically engineered allogeneic T cell product candidates for the treatment of cancer and autoimmune diseases. We are developing a pipeline of "off-the-shelf" T cell product candidates that are designed to target and kill cancer cells in patients or eliminate pathogenic autoreactive cells in patients with autoimmune disorders. Our engineered T cells are allogeneic, meaning they are derived from healthy donors for intended use in any patient, rather than from an individual patient for that patient's use, as in the case of autologous T cells. We believe this key difference will enable us to deliver readily available treatments faster, more reliably, at greater scale, and to more patients.

We have a deep pipeline of allogeneic chimeric antigen receptor (CAR) T cell product candidates targeting multiple promising antigens in a host of hematological malignancies, solid tumors, and autoimmune disease. Earlier this year, however, we announced our 2024 Platform Vision under which we are now focusing on four core programs.

We are currently focused on developing cemacabtagene ansegedleucel (cema-cel, previously ALLO-501A) in large B-cell lymphoma (LBCL) and chronic lymphocytic leukemia (CLL). In June 2024, we initiated a pivotal Phase 2 clinical trial (ALPHA3) for cema-cel as part of a first line (1L) treatment plan for newly diagnosed and treated LBCL patients who are likely to relapse and need further therapy. The design of the ALPHA3 1L consolidation trial builds upon the results demonstrated in the Phase 1 ALPHA2 trial and leverages an investigational diagnostic test developed by Foresight Diagnostics, Inc. that we believe will identify patients who have achieved remission by standard disease assessment but who have minimal residual disease (MRD) at the completion of 1L chemoimmunotherapy. The ALPHA3 trial is designed to study the impact of treating MRD positive patients with cema-cel. The study will randomize approximately 240 patients who achieve a complete response or partial response to 1L therapy, but who are MRD positive. The patients will be randomized to either consolidation with cema-cel or the current standard of care, which is observation. The design, with a primary endpoint of event free survival (EFS), will initially include two lymphodepletion arms (one with standard fludarabine and cyclophosphamide plus ALLO-647 and one with standard fludarabine and cyclophosphamide but without ALLO-647). One lymphodepletion arm will be discontinued following a planned interim analysis in mid-2025 designed to select the most appropriate regimen for this patient population. ALPHA3 is expected to complete enrollment in the first half of 2026. Efficacy analyses are expected to occur in 2026, and will include the Independent Data Safety Monitoring Board (IDSMB) interim EFS analysis in the first half of 2026 and the data readout of the primary EFS analysis is expected year-end 2026. A biologics license application (BLA) submission is targeted for 2027. In view of the potential of the earlier line ALPHA3 trial, we have deprioritized the third line (3L) LBCL ALPHA2 and EXPAND trials.

We have initiated the Phase 1b cohort of our ALPHA2 trial to evaluate cema-cel following lymphodepletion with fludarabine/cyclophosphamide and ALLO-647 in patients with relapsed/refractory chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL). This cohort will include up to 40 patients, and we expect to release initial data in early 2025.

We are enrolling a Phase 1 clinical trial (TRAVERSE) of ALLO-316, an allogeneic CAR T cell product candidate targeting CD70, in adult patients with advanced or metastatic clear cell renal cell carcinoma (RCC). We presented interim results from the TRAVERSE trial at the American Association of Cancer Research (AACR) Annual Meeting in April 2023. We have implemented a protocol amendment that incorporates a diagnostic and treatment algorithm into the study design. The algorithm is designed to mitigate the treatment-associated hyperinflammatory response without compromising the CAR T function needed to eradicate solid tumors. A data update from patients with CD70 positive RCC, which will include details on the algorithm, is planned by year-end 2024.

We are developing ALLO-329, a next-generation allogeneic CAR T cell product candidate targeting both CD19 and CD70 for the treatment of certain autoimmune diseases (AID). Inclusion of an anti-CD70 CAR in ALLO-329 incorporates the Dagger® technology, which is designed to reduce or eliminate the need for standard chemotherapy by preventing premature rejection while targeting CD19+ B-cells and CD70+ activated T-cells, both of which play a role in AID. We plan to file an investigational new drug (IND) application in the first quarter of 2025. We expect to initiate the Phase 1 trial with ALLO-329 in the first half of 2025 and have proof-of-concept by year-end 2025.

We are developing an anti-CD52 monoclonal antibody, ALLO-647, which is a proprietary component of our lymphodepletion regimen. ALLO-647 may be able to reduce the likelihood of a patient's immune system rejecting the engineered allogeneic T cells for a sufficient period of time to enable a window of persistence during which our engineered allogeneic T cells can actively target and destroy cancer cells. During Part A of our pivotal ALPHA3 trial, we will be assessing ALLO-647's contribution to the overall benefit to risk ratio of the lymphodepletion regimen for cema-cel. Patients will be randomized to receive cema-cel and a lymphodepletion regimen with fludarabine and cyclophosphamide either with or without ALLO-647. In mid-2025, we plan to select the lymphodepletion regimen with which we will complete enrollment in the study (Part B).

While we have additional programs in our pipeline, our development priorities are focused on cema-cel (1L Consolidation and CLL), ALLO-316, and ALLO-329. We will explore opportunities to partner with collaborators on product candidates across our pipeline.

In May 2024, we entered into an Amendment and Settlement Agreement (the Servier Amendment) under which we expanded the geographic territory for our license to include the European Union and the United Kingdom. The Servier Amendment also grants us an option to further expand the licensed territory to include China and Japan upon the objective showing of sufficient resources to develop licensed products in those countries, which could be met through the Company entering into a strategic partnership covering those countries. We estimate that the expansion of our license for the CD19 Products to the European Union and United Kingdom will substantially increase our market opportunity in 1L consolidation LBCL and R/R/ CLL from more than $6.0 billion in the U.S. alone to more than $9.5 billion across the U.S., European Union and United Kingdom, in turn increasing the potential future revenue opportunity for cema-cel by more than 50%.

Since inception, we have had significant operating losses. Our net losses were $66.4 million and $131.4 million for the three and six months ended June 30, 2024, respectively. As of June 30, 2024, we had an accumulated deficit of $1.7 billion. As of June 30, 2024, we had $444.6 million in cash and cash equivalents and investments and we expect our cash runway to fund operations into 2026. We expect to continue to incur net losses for the foreseeable future, and we expect our research and development expenses and general and administrative expenses will continue to increase.

Our Research and Development and License Agreements

Asset Contribution Agreement with Pfizer

In April 2018, we entered into an Asset Contribution Agreement (the Pfizer Agreement) with Pfizer pursuant to which we acquired certain assets and assumed certain liabilities from Pfizer, including agreements with Cellectis S.A. (Cellectis) and Servier as described below, and other intellectual property for the development and administration of CAR T cells for the treatment of cancer. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the Pfizer Agreement.

Research Collaboration and License Agreement with Cellectis

In June 2014, Pfizer entered into a Research Collaboration and License Agreement with Cellectis. In April 2018, Pfizer assigned the agreement to us pursuant to the Pfizer Agreement. In March 2019, we terminated the agreement with Cellectis and entered into a new license agreement with Cellectis. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further descriptions of the prior agreement with Cellectis and the new license agreement with Cellectis.

Exclusive License Agreement with Servier

In October 2015, Pfizer entered into an Exclusive License Agreement with Servier (the Original Servier Agreement) to develop, manufacture and commercialize certain allogeneic anti-CD19 CAR products, including UCART19, in the United States with the option to obtain the rights over certain additional allogeneic anti-CD19 CAR product candidates and for allogeneic CAR T cell product candidates directed against one additional target. In April 2018, Pfizer assigned the agreement to us pursuant to the Pfizer Agreement. In October 2019, we agreed to waive our rights to the one additional target.

In May 2024, the Servier Amendment expanded our territory under the Original Servier Agreement to include the European Union and the United Kingdom, and provides for an option to further expand our territory to include China and Japan
upon the objective showing of sufficient resources to develop licensed products in those countries, which could be met through us entering into a strategic partnership covering those countries. Additionally, we agreed to waive certain of our rights under the Servier Agreement to elect a conversion of our license to the licensed products directed against CD19, including UCART19, ALLO-501 and cema-cel (collectively, CD19 Products) to a worldwide license.

Additionally, under the Servier Amendment all of our future milestone payments (regulatory and sales) under the Original Servier Agreement were modified to be the same as, and to coincide with, Servier's milestone payments to Cellectis under a first development and commercialization agreement, dated February 7, 2014, by and between Cellectis and Servier (as amended, the Servier-Cellectis Agreement). The Servier Agreement provides for aggregate potential payments by us to Servier of up to €75 million, upon successful completion of various regulatory milestones and first commercial sale milestones in the United States, European Union and the United Kingdom for the initial indication of each licensed product, of which €60 million remains for the initial indication for cema-cel, with additional payments of €55 million due for each subsequent indication, of which €50 million remains for the first subsequent indication for cema-cel, and aggregate potential payments by us to Servier of up to €80 million upon achievement of certain net sales milestones for each licensed product. Should Servier's rights and obligations under the Servier-Cellectis Agreement be assigned to us, these milestone payments would terminate, and we would assume Servier's milestone payment obligation to Cellectis. In the absence of any such assignment, Servier will remain responsible for making milestone payments that may be due to Cellectis under the Servier-Cellectis Agreement.

As part of the settlement, we agreed to transfer €20 million into an escrow account in connection with a potential future milestone payment, which is included in the remaining €60 million in milestone payments referenced above for the initial indication for cema-cel. The milestone payment will be triggered, if at all, upon the occurrence of one of these events: (1) we dose the first subject in our first phase 3 clinical study for a CD19 CAR-T product that is a licensed product under the Servier Agreement, (2) we submit a phase 2 clinical study for a licensed product to the U.S. Food and Drug Administration or the European Medicines Agency, and, based on its results, such phase 2 clinical study is accepted for regulatory approval as a pivotal study, or (3) a final and definitive decision of a tribunal or court finding that under the corresponding milestone under the Servier-Cellectis Agreement has occurred and the €20 million payment is due to Cellectis.

The royalties under the Original Servier Agreement were also amended. The amended royalties include tiered royalties on annual net sales in the United States and a flat royalty on annual net sales in territories outside the United States. The United States royalty rates are in a range from the low tens to the mid teen percentages, and the ex-U.S. royalty rate is 10%. Such royalties may be reduced for interchangeable drug entry, expiration of patent rights and amounts paid pursuant to licenses of third-party patents. This royalty obligation begins upon the first commercial sale of such product in a given country and ends after the later of a defined number of years or the expiration of the last to expire licensed patent covering the product in such country. The net effect of the Servier Amendment is that our royalty rate in the United States for the first half of the first tier of net sales was increased by a low single digit percentage as compared to the Original Servier Agreement. Should Servier's rights and obligations under the Servier-Cellectis Agreement be assigned to us, each tier of royalty rates in the United States to Servier would be reduced by 10%, the ex-U.S. royalties to Servier would terminate, and we would assume Servier's royalty obligations to Cellectis. In the absence of any such assignment, Servier will remain responsible for making royalty payments that may be due to Cellectis under the Servier-Cellectis Agreement.

For more information, see "Risk Factors— *Servier's discontinuation of its involvement in the development of CD19 Products and Servier's disputes with Cellectis, or future disputes with us, may have adverse consequences.*"

See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the Servier Agreement.

Collaboration and License Agreement with Notch

On November 1, 2019, we entered into a Collaboration and License Agreement (the Notch Agreement) with Notch Therapeutics Inc. (Notch), pursuant to which Notch granted us an exclusive, worldwide, royalty-bearing, sublicensable license under certain of Notch's intellectual property to develop, make, use, sell, import, and otherwise commercialize therapeutic gene-edited T cell and/or natural killer cell products from induced pluripotent stem cells directed at certain CAR targets for initial application in NHL, B-cell precursor acute lymphoblastic leukemia (ALL) and multiple myeloma. In addition, Notch has granted us an option to add certain specified targets to our exclusive license in exchange for an agreed upon per-target option fee.

The Notch Agreement includes a research collaboration to conduct research and pre-clinical development activities to generate engineered cells directed to our exclusive targets, which will be conducted in accordance with an agreed research plan and budget under the oversight of a joint development committee. In connection with the execution of the Notch Agreement, we made an upfront payment to Notch of $10.0 million. In addition, we made a $5.0 million investment in Notch's series seed convertible preferred stock, resulting in us having a 25% ownership interest in Notch's outstanding capital stock on a fully diluted basis immediately following the investment. In February 2021, we made an additional $15.9 million investment in Notch's Series A preferred stock. In October 2021, we made an additional $1.8 million investment in Notch's common stock. Immediately following this transaction, our share in Notch was 23.0% on a voting interest basis.

On January 25, 2024, we entered into an Amended and Restated Collaboration and License Agreement (the Amended Notch Agreement) with Notch. The Amended Notch Agreement amends and restates the Notch Agreement. Under the Amended Notch Agreement, we have relinquished our exclusive rights to all original CAR targets (the Released Targets) except for one CAR target, and have agreed to limit our option right to only one additional CAR target. If the option is exercised, we will have a minimum funding commitment for the overall development program. If Notch subsequently out-licenses any of the Released Targets, we will be entitled to receive a percentage of upfront and/or milestone payments associated therewith up to a set cap of $30.0 million, and will be entitled to a low, single-digit royalty on net sales of products containing a Released Target. In addition, with respect to our previous equity investments in Notch, the Amended Notch Agreement grants us certain anti-dilution protections up to certain limits for certain pre-IPO equity financings. On May 17, 2024, Notch completed the Notch Series B Financing. Although we did not participate in the Notch Series B Financing, we received Series B preferred stock of Notch pursuant to our anti-dilution rights. In connection with the Notch Series B Financing, we waived certain of our anti-dilution rights in exchange for a low single digit percentage reduction in the royalty rate for the royalties we are obliged to pay to Notch under our Notch intellectual property license should we commercialize a licensed product. We also waived our right to appoint one member of the Notch board of directors, but retained board observation rights. As a result of the Notch Series B Financing, our ownership interest in Notch was reduced from 23% to approximately 13%.

See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the Notch Agreement.

Strategic Alliance with The University of Texas MD Anderson Cancer Center

On October 6, 2020, we entered into a strategic five-year collaboration agreement with The University of Texas MD Anderson Cancer Center (MD Anderson) for the preclinical and clinical investigation of allogeneic CAR T cell product candidates. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the agreement with MD Anderson.

License Agreement with Allogene Overland Biopharm (PRC) Co., Limited

On December 14, 2020, we entered into a License Agreement with Allogene Overland Biopharm (CY) Limited (Allogene Overland) (the License Agreement), a joint venture established by us and Overland Pharmaceuticals (CY) Inc. (Overland), pursuant to a Share Purchase Agreement (Share Purchase Agreement), dated December 14, 2020, for the purpose of developing, manufacturing and commercializing certain allogeneic CAR T cell therapies directed at four targets, BCMA, CD70, FLT3, and DLL3 (Overland Licensed Products) for patients in greater China, Taiwan, South Korea and Singapore (the JV Territory). Allogene Overland subsequently assigned the License Agreement to a wholly owned subsidiary, Allogene Overland BioPharm (HK) Limited (Allogene Overland HK). On April 1, 2022, Allogene Overland HK assigned the License Agreement to Allogene Overland Biopharm (PRC) Co., Limited (Allogene Overland PRC). See Note 6 to our condensed consolidated

financial statements included elsewhere in this report for further description of the License Agreement and Share Purchase Agreement.

On May 24, 2024, we, Overland and Allogene Overland entered into a Share Exchange Agreement (Share Exchange Agreement) pursuant to which Overland's cell therapy business merged into Allogene Overland (the Organizational Restructuring). Under a separate agreement between Overland and HH BioPharma Holdings Ltd. (HBP) executed on May 24, 2024, Overland distributed all Series Seed Preferred Shares of Allogene Overland held by Overland to HBP and HBP has assumed all rights and obligations attached to such shares and all rights and obligations of Overland under the Share Exchange Agreement.

In connection with the Organizational Restructuring, on May 24, 2024, we and Allogene Overland PRC entered into a First Amendment to Exclusive License Agreement (the License Amendment) to amend and supplement certain provisions of the License Agreement. Under the License Amendment, we continue to grant Allogene Overland PRC an exclusive license to develop, manufacture, and commercialize the Overland Licensed Products in the Territory, with us retaining exclusive rights to the Overland Licensed Products outside the JV Territory, and the royalty obligations to us were amended to a flat mid single-digit royalty on net sales in the JV Territory that are no longer subject to reductions as previously provided. The License Amendment also provides us with additional rights to terminate the License Agreement in its entirety or with respect to the relevant Overland Licensed Product(s) if Allogene Overland PRC fails to initiate manufacturing technology transfer with respect to an Overland Licensed Product as agreed in the License Amendment, or if HBP commits a funding default or a material breach of its representations, warranties, or covenants under the Share Exchange Agreement. The License Amendment also provides that the License Agreement will terminate automatically if our ownership in Allogene Overland falls below 7.5% (other than due to our sale of the shares of Allogene Overland), unless at that time we and Allogene Overland PRC have mutually agreed on the manufacturing technology transfer plan for the Overland Licensed Product(s) and Allogene Overland PRC elects to continue the license for such Overland Licensed Product(s) with increased milestones and royalties. Under the License Amendment terms such increased milestones and royalties consist of up to $115 million in milestone payments for each Overland Licensed Product and tiered mid single-digit to low double-digit royalties on net sales in the JV Territory.

As part of the Organizational Restructuring, Allogene Overland was renamed to Overland Therapeutics Inc. (Overland Therapeutics).

See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the License Agreement, Share Purchase Agreement, and Share Exchange Agreement.

Collaboration and License Agreement with Antion

On January 5, 2022, we entered into an exclusive collaboration and global license agreement (Antion Collaboration and License Agreement) with Antion Biosciences SA (Antion) for Antion's miRNA technology (miCAR), to advance multiplex gene silencing as an additional tool to develop next generation allogeneic CAR T products. On July 11, 2023, we entered into an amendment to the Antion Collaboration and License Agreement, which included a $2.0 million investment in Antion's preferred shares and the acquisition of warrants to purchase an additional $3.0 million of Antion's preferred shares. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the Antion Agreement and the July 2023 amendment.

Strategic Collaboration Agreement with Foresight Diagnostics

On January 3, 2024, we entered into a Strategic Collaboration Agreement (the Foresight Agreement) with Foresight Diagnostics, Inc. (Foresight Diagnostics). Pursuant to the Foresight Agreement, the parties have agreed to collaborate on a non-exclusive basis in the development of Foresight Diagnostics' MRD assay as an in vitro diagnostic to identify the MRD+ patient population to be enrolled in our ALPHA3 trial of cemacabtagene ansegedleucel, or cema-cel (previously known as ALLO-501A) for treatment of large B cell lymphoma (LBCL). Under the Foresight Agreement, we have agreed to use commercially reasonable efforts to obtain regulatory approval of cema-cel, and Foresight Diagnostics has agreed to use commercially reasonable efforts to obtain regulatory approval of an MRD assay for use as an in vitro diagnostic with cema-cel. See Note 6 to our condensed consolidated financial statements included elsewhere in this report for further description of the Foresight Agreement.

Components of Results of Operations

Revenues

As of June 30, 2024, our revenue has been exclusively generated from the License Agreement with Allogene Overland PRC. See Note 6 to our financial statements appearing elsewhere in this Quarterly Report for more information related to our recognition of revenue and the License Agreement.

In the future, we may generate revenue from a combination of product sales, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements or a combination of these approaches. We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the timing and amount of license fees, milestones and other payments, and the amount and timing of payments that we receive upon the sale of our products, to the extent any are successfully commercialized. If we fail to complete the development of our product candidates in a timely manner or obtain regulatory approval of them, our ability to generate future revenue, and our results of operations and financial position, will be materially adversely affected.

Operating Expenses

Research and Development

To date, our research and development expenses have related primarily to discovery efforts, preclinical and clinical development, and manufacturing of our product candidates. Research and development expenses for the three and six months ended June 30, 2024 included costs associated with our clinical and preclinical stage pipeline candidates and research into newer technologies. The most significant research and development expenses for the year to date relate to costs incurred for the development of our most advanced product candidates and include:

- expenses incurred under agreements with our collaboration partners and third-party contract organizations, investigative clinical trial sites that conduct research and development activities on our behalf, and consultants;
- costs related to production of clinical materials, including fees paid for raw materials and to contract manufacturers;
- laboratory and vendor expenses related to the execution of preclinical and clinical trials;
- employee-related expenses, which include salaries, benefits and stock-based compensation;
- facilities and other expenses, which include expenses for rent and maintenance of facilities, depreciation and amortization expense and supplies; and
- other significant research and development costs including overhead costs.

We expense all research and development costs in the periods in which they are incurred. We accrue for costs incurred as the services are being provided by monitoring the status of the project and the invoices received from our external service providers. We adjust our accrual as actual costs become known. Where contingent milestone payments are due to third parties under research and development arrangements or license agreements, the milestone payment obligations are expensed when the milestone results are achieved.

Research and development activities are central to our business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect our research and development expenses to increase in the future as our clinical programs progress and as we seek to initiate clinical trials of additional product candidates. The cost of advancing our manufacturing process as well as the cost of manufacturing product candidates for clinical trials are included in our research and development expense. We also expect to incur increased research and development expenses as we selectively identify and develop additional product candidates. However, it is difficult to determine with certainty the duration and completion costs of our current or future preclinical programs and clinical trials of our product candidates.

The duration, costs and timing of clinical trials and development of our product candidates will depend on a variety of factors that include, but are not limited to, the following:

- per patient trial costs;
- biomarker analysis costs;
- the cost and timing of manufacturing for the trials;
- the number of patients that participate in the trials;
- the number of sites included in the trials;
- the countries in which the trials are conducted;

- the length of time required to enroll eligible patients;
- the total number of cells that patients receive;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring or other studies requested by regulatory agencies, including to resolve any future clinical hold;
- the duration of patient follow-up; and
- the efficacy and safety profile of the product candidates.

In addition, the probability of success for each product candidate will depend on numerous factors, including safety, efficacy, competition, manufacturing capability and commercial viability. We will determine which programs to pursue and how much to fund each program in response to the scientific and clinical success of each product candidate, as well as an assessment of each product candidate's commercial potential.

Because our product candidates are still in clinical and preclinical development and the outcome of these efforts is uncertain, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of product candidates or whether, or when, we may achieve profitability.

We do not track most of our external research and development expenses by programs or product candidates because most of our external research and development expenses could be used for different programs or product candidates.

General and Administrative

General and administrative expenses consist primarily of salaries and other staff-related costs, including stock-based compensation for options and restricted stock units granted. Other significant costs include costs relating to facilities and overhead costs, legal fees relating to corporate and patent matters, insurance, investor relations costs, fees for accounting and consulting services, information technology, costs and support for our board of directors and board committees, and other general and administrative costs. General and administrative costs are expensed as incurred, and we accrue for services provided by third parties related to the above expenses by monitoring the status of services provided and receiving estimates from our service providers, and adjusting our accruals as actual costs become known.

We expect our general and administrative expenses to increase over the next several years to support our continued research and development activities, manufacturing activities, potential commercialization of our product candidates and operating as a public company. These increases are anticipated to include increased costs related to the hiring of additional personnel, developing commercial infrastructure, fees to outside consultants, lawyers, and accountants, and costs associated with being a public company such as expenses related to services associated with maintaining compliance with Nasdaq listing rules and SEC requirements, complying with and advancing environmental, social and governance matters, and insurance and investor relations costs.

Other Income (Expense), Net:

Interest and Other Income, Net

Interest and other income, net consists of interest earned on our cash and cash equivalents and investments, as well as investment gains and losses recognized during the period.

Other Income and Expense, Net

Other income and expense, net consist of non-operating income and expenses, including our share of equity investments' net losses for the period.

Results of Operations

Comparison of the Three Months Ended June 30, 2024 and 2023

The following sets forth our results of operations for the three months ended June 30, 2024 and 2023 (dollars in thousands):

	Three Months Ended June 30,		Change	
	2024	2023	$	%
Collaboration revenue - related party	$ —	$ 22	$ (22)	(100) %
Operating expenses:				
Research and development	50,355	62,038	(11,683)	(19) %
General and administrative	16,087	18,524	(2,437)	(13) %
Impairment of long-lived assets	4,989	—	4,989	100 %
Total operating expenses	71,431	80,562	(9,131)	(11) %
Loss from operations	(71,431)	(80,540)	9,109	(11) %
Other income (expense), net:				
Interest and other income, net	4,988	3,778	1,210	32 %
Other income and expense, net	85	(2,470)	2,555	(103) %
Total other income (expense), net	5,073	1,308	3,765	288 %
Net Loss	(66,358)	(79,232)	12,874	(16) %

Collaboration revenue - related party

Collaboration revenue recognized for the three months ended June 30, 2023 was mainly due to participation in the joint steering committee performance obligation related to the License Agreement with Allogene Overland PRC.

Research and Development Expenses

The following table shows the primary components of our research and development expenses for the periods presented:

	Three Months Ended June 30,		
	2024	2023	Change
Personnel	$ 19,139	$ 29,574	$ (10,435)
Development costs	18,377	18,218	159
Facilities and depreciation	10,281	11,457	(1,176)
Other	2,558	2,789	(231)
Total research and development expenses	50,355	62,038	(11,683)

Our research and development expenses included $22.1 million of internal expenses and $28.3 million of external expenses for the three months ended June 30, 2024. Our research and development expenses included $31.1 million of internal expenses and $30.9 million of external expenses for the three months ended June 30, 2023.

Research and development expenses were $50.4 million and $62.0 million for the three months ended June 30, 2024 and 2023, respectively. The decrease of $11.7 million was driven primarily by a decrease in personnel related costs of $10.4 million, including $2.2 million related to a decrease in stock-based compensation expense and a decrease in facilities and depreciation expense of $1.2 million.

General and Administrative Expenses

General and administrative expenses were $16.1 million and $18.5 million for the three months ended June 30, 2024 and 2023, respectively. The decrease of $2.4 million was primarily due to a decrease in personnel related costs of $1.6 million, including $0.8 million related to a decrease in stock-based compensation expense.

Impairment of long-lived asset

In June 2024, we made a decision to sublease one of our leased buildings in South San Francisco. We vacated and ceased occupancy of this building in June 2024 and currently we are actively marketing the leased building for sublease. We recorded long-lived asset impairment charge based on the performed impairment analysis.

Interest and Other Income, Net

Interest and other income, net was $5.0 million and $3.8 million for the three months ended June 30, 2024 and 2023, respectively. The increase of $1.2 million was due to higher yields and a corresponding increase in the interest earned on our cash, cash equivalents and investments.

Other Income and Expense, Net

Other income was $0.1 million and other expense was $2.5 million for the three months ended June 30, 2024 and 2023, respectively. The decrease in other expenses of $2.6 million was primarily due to a decrease in the share of net losses in our equity method investments and gain from the Organizational Restructuring of Overland Therapeutics.

Comparison of the Six Months Ended June 30, 2024 and 2023

The following sets forth our results of operations for the six months ended June 30, 2024 and 2023 (dollars in thousands):

	Six Months Ended June 30,		Change	
	2024	2023	$	%
Collaboration revenue - related party	$ 22	$ 52	$ (30)	(58) %
Operating expenses:				
Research and development	102,614	142,276	(39,662)	(28) %
General and administrative	33,354	37,408	(4,054)	(11) %
Impairment of long-lived assets	4,989	—	4,989	100 %
Total operating expenses	140,957	179,684	(38,727)	(22) %
Loss from operations	(140,935)	(179,632)	38,697	(22) %
Other income (expense), net:				
Interest and other income, net	10,421	5,837	4,584	79 %
Other income and expense, net	(844)	(5,405)	4,561	(84) %
Total other income (expense), net	9,577	432	9,145	2117 %
Net Loss	(131,358)	(179,200)	47,842	(27) %

Collaboration revenue - related party

Collaboration revenue recognized for the six months ended June 30, 2024 and 2023 was mainly due to participation in the joint steering committee performance obligation related to the License Agreement with Allogene Overland PRC.

Research and Development Expenses

The following table shows the primary components of our research and development expenses for the periods presented:

	Six Months Ended June 30,		
	2024	2023	Change
Personnel	$ 41,891	$ 63,748	$ (21,857)
Development costs	35,083	49,479	(14,396)
Facilities and depreciation	20,784	22,650	(1,866)
Other	4,856	6,399	(1,543)
Total research and development expenses	102,614	142,276	(39,662)

Our research and development expenses included $47.5 million of internal expenses and $55.1 million of external expenses for the six months ended June 30, 2024. Our research and development expenses included $66.3 million of internal expenses and $75.9 million of external expenses for the six months ended June 30, 2023.

Research and development expenses were $102.6 million and $142.3 million for the six months ended June 30, 2024 and 2023, respectively. The decrease of $39.7 million was driven primarily by a decrease in personnel related costs of $21.9 million, including $8.3 million related to a decrease in stock-based compensation expense, a decrease in external costs relating to the advancement of our product candidates due to the timing of development activities and manufacturing runs of $14.4 million and a decrease in facilities, depreciation, and other expense of $3.4 million.

General and Administrative Expenses

General and administrative expenses were $33.4 million and $37.4 million for the six months ended June 30, 2024 and 2023, respectively. The decrease of $4.1 million was primarily due to a decrease in personnel related costs of $3.3 million, including $1.6 million related to a decrease in stock-based compensation expense.

Impairment of long-lived asset

In June 2024, we made a decision to sublease one of our leased buildings in South San Francisco. We vacated and ceased occupancy of this building in June 2024 and currently we are actively marketing the leased building for sublease. We recorded long-lived asset impairment charge based on the performed impairment analysis.

Interest and Other Income, Net

Interest and other income, net was $10.4 million and $5.8 million for the six months ended June 30, 2024 and 2023, respectively. The increase of $4.6 million was due to higher yields and a corresponding increase in the interest earned on our cash, cash equivalents and investments.

Other Income and Expense, Net

Other expenses, net were $0.8 million and $5.4 million for the six months ended June 30, 2024 and 2023, respectively. The decrease in other expenses of $4.6 million was primarily due to a decrease in the share of net losses in our equity method investments and gain from the Organizational Restructuring of Overland Therapeutics.

Liquidity and Capital Resources

To date, we have incurred significant net losses and negative cash flows from operations. As of June 30, 2024, we had $444.6 million in cash and cash equivalents and investments. We anticipate that the aggregate of our current cash and cash equivalents and investments available for operations will be sufficient to fund our operations for at least the next 12 months from the date this Quarterly Report is filed with the SEC.

Our operations have been financed primarily by net proceeds from the sale and issuance of our convertible preferred stock, the issuance of convertible promissory notes, net proceeds from our IPO, our at-the-market (ATM) offerings, our June 2020 underwritten public offering, our May 2024 registered offering, and an upfront cash payment of $40.0 million received in December 2020 pursuant to our License Agreement with Allogene Overland PRC. In November 2019, we entered into a sales agreement with Cowen and Company, LLC (Cowen), as amended on November 2, 2022 and November 2, 2023, under which we may from time to time issue and sell shares of our common stock through Cowen in ATM offerings. During the three and six months ended June 30, 2024, we sold an aggregate of 250,000 shares of our common stock in ATM offerings resulting in net proceeds of $1.0 million. The specified dollar limit on the amount of common stock that may be sold under the sales agreement was removed pursuant to the November 2, 2023 amendment to the sales agreement. In March 2024, we filed a sales agreement prospectus within a registration statement on Form S-3, registering the offering, issuance and sale of up to $250.0 million of our common stock in ATM offerings. On May 13, 2024, we entered into (i) an underwriting agreement (Underwriting Agreement) with Goldman Sachs & Co. LLC (Underwriter) and (ii) a Securities Purchase Agreement (Securities Purchase Agreement) with certain members of our Board of Directors and our executive officers or their respective affiliates (Purchasers), pursuant to which we sold and issued to the Underwriter and the Purchasers an aggregate of 37,931,035 shares of our common stock resulting in net proceeds of $105.2 million in a registered offering transaction that closed on May 16, 2024.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Six Months Ended June 30,	
	2024	2023
	(In thousands)	
Net cash (used in) provided by:		
Operating activities	$ (119,487)	$ (128,496)
Investing activities	96,746	130,095
Financing activities	110,253	91,255
Net increase (decrease) in cash and cash equivalents and restricted cash	$ 87,512	$ 92,854

Operating Activities

During the six months ended June 30, 2024, cash used in operating activities of $119.5 million was attributable to a net loss of $131.4 million and a decrease of $21.2 million in our net operating assets and liabilities, partially offset by non-cash charges of $33.1 million. The non-cash charges consisted primarily of stock-based compensation expense of $25.5 million, impairment of long-lived assets of 5.0 million, depreciation of $7.2 million, and our share of equity investments' net losses for the period of $0.6 million, partially offset by net amortization and accretion on investment securities of $5.0 million. The change in operating assets and liabilities was primarily due to a $21.4 million deposit placed in escrow related to the Servier Amendment, a $6.7 million decrease in accrued and other current liabilities, and a $2.0 million increase in prepaid expenses and other current assets, partially offset by a $6.7 million increase in accounts payable and a $2.1 million decrease in other long-term assets.

During the six months ended June 30, 2023, cash used in operating activities of $128.5 million was attributable to a net loss of $179.2 million, partially offset by non-cash charges of $47.6 million and an increase of $3.1 million in our net operating assets and liabilities. The non-cash charges consisted primarily of stock-based compensation expense of $35.4 million, depreciation of $7.2 million, our share of equity investments' net losses for the period of $5.4 million, and non-cash rent expense of $0.4 million, partially offset by net amortization and accretion on investment securities of $0.6 million. The change in operating assets and liabilities was primarily due to a $5.6 million increase in accrued and other current liabilities and a $1.4 million decrease in prepaid expenses and other current assets, partially offset by a $3.2 million decrease in accounts payable and a $0.6 million decrease in other long-term liabilities.

Investing Activities

During the six months ended June 30, 2024, net cash provided by investing activities of $96.7 million was related to cash provided by investment maturities of $220.5 million, partially offset by cash used in the purchase of investments of $123.7 million.

During the six months ended June 30, 2023, net cash provided by investing activities of $130.1 million was related to cash provided by investment maturities of $296.3 million and cash provided by investment sales of $5.6 million, partially offset by cash used in purchases of investments of $170.5 million and cash used in the purchase of property and equipment of $1.3 million.

Financing Activities

During the six months ended June 30, 2024, cash provided by financing activities of $110.3 million was related to $105.3 million in net proceeds from the issuance of common stock through our May 2024 registered offering, $1.0 million of net proceeds from the issuance of common stock through ATM transactions, $2.3 million of cash provided from the CIRM award, $0.9 million of cash provided by the sale of common stock through our employee stock purchase plan, and $0.8 million of cash provided by the issuance of common stock upon exercise of stock options.

During the six months ended June 30, 2023, cash provided by financing activities of $91.3 million was related to $87.9 million in net proceeds from the issuance of common stock through ATM transactions, $1.7 million of cash provided by the sale of common stock through our employee stock purchase plan, and $1.6 million of cash provided by the issuance of common stock upon exercise of stock options.

Material Cash Commitments and Requirements

Our primary use of cash is for operating expenses, which consist primarily of clinical manufacturing and research and development expenditures related to our lead product candidates, other research efforts, and to a lesser extent, general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay these expenses, as reflected in the change in our outstanding accounts payable and accrued expenses and other current liabilities.

Our product candidates are still in the early stages of clinical and preclinical development and the outcome of these efforts is uncertain. Accordingly, we cannot estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates or whether, or when, we may achieve profitability. Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity or debt financings and collaboration and license arrangements. If, and when, we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we 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 raise capital when needed, we will need to delay, reduce or terminate planned activities to reduce costs. Doing so will likely harm our ability to execute our business plans.

Our commitments primarily consist of obligations under our agreements with Pfizer, Cellectis, Servier and Notch. Under these agreements we are required to make milestone payments upon successful completion of certain regulatory and sales milestones on a target-by-target and country-by-country basis. The payment obligations under the license agreements are contingent upon future events such as our achievement of specified development, regulatory and commercial milestones and we will be required to make development milestone payments and royalty payments in connection with the sale of products developed under these agreements. As of June 30, 2024, we were unable to estimate the timing or likelihood of achieving the milestones or making future product sales. For additional information regarding our agreements, see Note 6 to our condensed consolidated financial statements included elsewhere in this report.

Our operating lease obligations primarily consist of lease payments on our research, lab and office facilities in South San Francisco, California, as well as lease payments on our cell manufacturing facility in Newark, California. For additional information regarding our lease obligations, see Note 7 to our condensed consolidated financial statements included elsewhere in this report.

Additionally, we have entered into agreements with third-party contract manufacturers for the manufacture and processing of certain of our product candidates for clinical testing purposes, and we have entered and will enter into other contracts in the normal course of business with contract research organizations for clinical trials and other vendors for other services and products for operating purposes. These agreements generally provide for termination or cancellation, other than for costs already incurred. As of June 30, 2024, the Company had non-cancellable purchase commitments of $0.7 million.

On October 6, 2020, we announced we entered into a strategic five-year collaboration agreement with MD Anderson for the preclinical and clinical investigation of allogeneic CAR T cell product candidates. We and MD Anderson are collaborating on the design and conduct of preclinical and clinical studies with oversight from a joint steering committee. Under the terms of the agreement, we have committed up to $15.0 million of funding for the duration of the agreement. Payment of this funding is contingent on mutual agreement to study orders in order for any study to be included under the alliance. We made an upfront payment of $3.0 million to MD Anderson in the year ended December 31, 2020 and made an additional upfront payment of $3.0 million to MD Anderson in October 2023. We are obligated to make further payments to MD Anderson each year upon the anniversary of the agreement effective date through the duration of the agreement term. The agreement may be terminated by either party for material breach by the other party. Individual studies may be terminated for, among other things, material breach, health and safety concerns or where the institutional review board, the review board at the clinical site with oversight of the clinical study, requests termination of any study. Where any legal or regulatory authorization is finally withdrawn or terminated, the relevant study will also terminate automatically.

On January 3, 2024, we entered into the Foresight Agreement with Foresight Diagnostics. We agreed to fund approximately $26.2 million in MRD assay development costs, milestone payments for regulatory submissions and assay utilization to process clinical samples. For additional information regarding this agreement, see Note 6 to our condensed consolidated financial statements included elsewhere in this report.

In July 2020, we entered into a Solar Power Purchase and Energy Services Agreement for the installation and operation of a solar photovoltaic generating system and battery energy storage system at our manufacturing facility in Newark, California. The agreement has a term of 20 years and commenced in September 2022. We are obligated to pay for electricity generated from the system at an agreed rate for the duration of the agreement term. Termination of the agreement by us will

result in a termination payment due of approximately $4.3 million. In connection with the agreement, we maintain a letter of credit for the benefit of the service provider in the amount of $4.3 million.

We also have a Change in Control and Severance Plan that requires the funding of specific payments, if certain events occur, such as a change of control and the termination of employment without cause.

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 have been prepared in accordance with United States generally accepted accounting principles. 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 condensed consolidated financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our 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. Actual results may differ from these estimates under different assumptions or conditions.

We believe that the assumptions and estimates associated with accrued research and development expenditures, stock-based compensation and leases have the most significant impact on our condensed consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates.

There have been no significant changes in our critical accounting policies and estimates as compared to the critical accounting policies and estimates disclosed in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report.

Recent Accounting Pronouncements

There have been no new accounting pronouncements issued or effective that are expected to have a material impact on our unaudited condensed consolidated financial statements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to market risks in the ordinary course of our business. These risks primarily relate to interest rate fluctuations.

Interest Rate Risk

Our cash and cash equivalents and investments of $444.6 million as of June 30, 2024 consist of bank deposits, money market funds and available-for-sale securities. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant for us. A 10% change in the interest rates in effect on June 30, 2024 would not have had a material effect on the fair market value of our cash equivalents and available-for-sale securities.

Foreign Exchange Rate Risk

Our collaboration agreement with Servier requires milestone payments upon successful completion of certain regulatory milestones on a target-by-target basis to be paid in Euros, and thus we face foreign exchange risk as a result of entering into transactions denominated in currencies other than U.S. dollars. Due to the uncertain timing of expected payments in foreign currencies, we do not utilize any forward exchange contracts. All foreign transactions settle on the applicable spot exchange basis at the time such payments are made. An adverse movement in foreign exchange rates could have an effect on payments due and made to our collaboration partner as well as other foreign suppliers and for license agreements. A 10% change in the applicable foreign exchange rates during the periods presented would not have had a material effect on our condensed consolidated financial statements. As of June 30, 2024, we had $21.4 million of deposit placed in escrow and $5.8 million of current liabilities denominated in foreign currency.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

As of June 30, 2024, management, with the participation of our Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (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 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 this evaluation, and as a result of the material weakness described below, our Chief Executive Officer and Chief Financial Officer concluded that, as of June 30, 2024, our disclosure controls and procedures were not effective at a reasonable assurance level.

As described in Company's Annual Report filed with the SEC on March 14, 2024, we re-evaluated our prior accounting for shares received in the License Agreement and Share Purchase Agreement entered into on December 14, 2020, with Allogene Overland. Upon reassessment, we determined that the 49% of Allogene Overland's Seed Preferred Shares received as a partial consideration for the License Agreement should be initially measured at fair value. We identified a material weakness in the operation of internal controls over financial reporting with respect to the technical accounting analysis of significant non-routine transactions.

Status of Remediation of Material Weakness

To remediate this material weakness, during the three months ended June 30, 2024, we continued to improve the operation of our controls over financial reporting with respect to the technical accounting analysis of significant non-routine transactions, which includes engaging third-party subject matter experts with significant relevant experience. While we believe that these efforts will improve our internal control over financial reporting, the implementation of our remediation is ongoing and we will not consider the material weakness remediated until our controls are operational for a sufficient period of time and tested, enabling management to conclude that the controls are operating effectively.

While the foregoing measures are intended to effectively remediate the material weakness described in this Item 4, it is possible that additional remediation steps will be necessary. As such, as we continue to evaluate and implement our plan to remediate the material weakness, our management may decide to take additional measures to address the material weakness or modify the remediation steps described above. Until this material weakness is remediated, we plan to continue to perform additional analyses and other procedures to help ensure that our condensed consolidated financial statements are prepared in accordance with GAAP.

Changes in Internal Control over Financial Reporting

Other than as discussed under the "Status of Remediation of Material Weakness" heading, no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the three months ended June 30, 2024 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II-OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we may become involved in legal proceedings relating to claims arising from the ordinary course of business. Our management believes that there are currently no claims or actions pending against us, the ultimate disposition of which could have a material adverse effect on our results of operations, financial condition or cash flows.

Item 1A. Risk Factors

RISK FACTOR SUMMARY

Below is a summary of the material factors that make an investment in our common stock speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary, and other risks that we face, can be found below under the heading "Risk Factors" and should be carefully considered, together with other information in this Quarterly Report and our other filings with the SEC before making investment decisions regarding our common stock.

Risks Related to Our Financial Position and Capital Needs

- We have incurred net losses in every period since our inception and anticipate that we will incur substantial net losses in the future.
- We will need substantial additional financing to develop our products and implement our operating plans. If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates.
- We may fail to meet our publicly announced guidance or other expectations about our business, which would cause our stock price to decline.

Risks Related to Our Business and Industry

- Our product candidates are based on novel technologies, which makes it difficult to predict the time and cost of product candidate development and the likelihood of obtaining regulatory approval.
- Our business is highly dependent on the success of our lead product candidates. If we are unable to advance clinical development, obtain approval of and successfully commercialize our lead product candidates for the treatment of patients in approved indications, our business would be significantly harmed.
- Our product candidates may cause undesirable side effects or have other properties that have halted and could in the future halt their clinical development, prevent their regulatory approval, limit their commercial potential or result in significant negative consequences.
- Our clinical trials may fail to demonstrate the safety and efficacy of any of our product candidates, which would prevent or delay regulatory approval and commercialization.
- Phase 1 data from our clinical trials is limited and may change as more patient data becomes available or may not be validated in any future or advanced clinical trial.
- We may not be able to submit INDs or equivalent foreign applications, to commence additional clinical trials on the timelines we expect, and even if we are able to, the FDA or comparable foreign regulatory authorities, may not permit us to proceed.
- We may encounter substantial delays in our clinical trials, or may not be able to conduct our trials on the timelines we expect.
- If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.
- We may fail to successfully manufacture our product candidates, operate our own manufacturing facility, or obtain regulatory approval to utilize or commercialize from our manufacturing facility or at a contract development and manufacturing organization (CDMO), which could adversely affect our clinical trials and the commercial viability of our product candidates.
- We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.
- We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.

- Our reduction in force undertaken to extend our cash runway and focus more of our capital resources on our prioritized research and development programs might not achieve our intended outcome.

Risks Related to the Development of Our Product Candidates

- Our engineered allogeneic T cell product candidates represent a novel approach to cancer treatment that creates significant challenges for us.
- Gene-editing is a relatively new technology, and if we are unable to use this technology in our intended product candidates, our revenue opportunities will be materially limited.
- We are heavily reliant on our partners for access to TALEN® gene editing technology for the manufacturing and development of our oncology product candidates.
- Servier's discontinuation of its involvement in the development of CD19 Products and Servier's disputes with Cellectis, or future disputes with us, may have adverse consequences.

Risks Related to Our Reliance on Third Parties

- We rely and will continue to rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.
- We rely on T cells from healthy donors to manufacture our product candidates, and if we do not obtain an adequate supply of T cells from qualified donors, development of those product candidates, or commercialization, if approved, may be adversely impacted.

Risks Related to Government Regulation

- The FDA, or comparable foreign authorities, may disagree with our regulatory plan and we may fail to obtain regulatory approval of our CAR T cell product candidates.
- If we, or our collaborators, are required by the FDA, or comparable foreign regulatory authorities, to obtain approval (or clearance, or certification) of a companion diagnostic device in connection with approval of one of our product candidates, and we, or our collaborators, do not obtain, or face delays in obtaining, approval (or clearance, or certification) of a companion diagnostic device, we will not be able to commercialize the product candidate, and our ability to generate revenue will be materially impaired.

Risks Related to Our Intellectual Property

- We depend on intellectual property licensed from third parties and termination of any of these licenses could result in the loss of significant rights, which would harm our business.
- If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our market.

Risks Related to Ownership of Our Common Stock

- We have identified a material weakness in our internal control over financial reporting. This material weakness could continue to adversely affect our ability to report our results of operations and financial condition accurately and in a timely manner.

RISK FACTORS

An investment in shares of our common stock involves a high degree of risk. You should carefully consider the following risk factors, as well as the other information in this report, before deciding whether to purchase, hold or sell shares of our common stock. The occurrence of any of the following risks could harm our business, financial condition, results of operations and/or growth prospects or cause our actual results to differ materially from those contained in forward-looking statements we have made in this report and those we may make from time to time. You should consider all of the risk factors described below when evaluating our business. The risk factors set forth below that are marked with an asterisk (*) contain changes to the similarly titled risk factors included in, or did not appear as separate risk factors in, Item 1A of our Annual Report, which was filed with the SEC on March 14, 2024.

Risks Related to Our Financial Position and Capital Needs

We have incurred net losses in every period since our inception and anticipate that we will incur substantial net losses in the future.*

We are a clinical-stage biopharmaceutical company and investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate efficacy or an acceptable safety profile, gain regulatory approval and become commercially viable. We are advancing an allogeneic CAR T platform of primarily early-stage product candidates and have no products approved for commercial sale and have not generated any revenue from product sales to date, and we will continue to incur significant research and development and other expenses related to our ongoing operations. To date, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, securing related intellectual property rights, building our product manufacturing infrastructure, including a dedicated good manufacturing practices (GMP) manufacturing facility, manufacturing our clinical product candidates and conducting discovery, research and development activities for our programs. As a result, we are not profitable and have incurred net losses in each period since our inception. For the year ended December 31, 2023, we reported a net loss of $327.3 million. For the six months ended June 30, 2024, we reported a net loss of $131.4 million. As of June 30, 2024, we had an accumulated deficit of $1.7 billion.

We expect to incur significant expenditures for the foreseeable future, and we expect these expenditures to increase as we continue our research and development of, and seek regulatory approvals for, product candidates based on our engineered allogeneic T cell platform. Because our allogeneic T cell product candidates are based on new technologies and will require the creation of inventory of mass-produced, off-the-shelf product, they will require extensive research and development and have substantial manufacturing and processing costs. In addition, costs to treat patients with relapsed or refractory cancer and to treat potential side effects that may result from our product candidates can be significant.

We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. For instance, the U.S. Food and Drug Administration (FDA) placed our clinical trials on hold in October 2021, which suspended our clinical programs prior to resolution of the hold in January 2022. Even if we succeed in advancing our clinical trials and 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. 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 need substantial additional financing to develop our products and implement our operating plans. If we fail to obtain additional financing, we may be unable to complete the development and commercialization of our product candidates.*

We expect to spend a substantial amount of capital in the development and manufacture of our product candidates. We will need substantial additional financing to develop our products and implement our operating plans. In particular, we will require substantial additional financing to enable commercial production of our products and initiate and complete registrational trials for multiple products in multiple regions. Further, if approved, we will require significant additional capital in order to launch and commercialize our product candidates.

As of June 30, 2024, we had $444.6 million in cash and cash equivalents and investments. Changing circumstances may cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more money than currently expected because of circumstances beyond our control. We may also need to raise additional capital sooner than we currently anticipate if we choose to expand more rapidly than we presently plan. In any event, we will require additional capital for the further development and commercialization of our product candidates, including funding our internal manufacturing capabilities.

We cannot be certain that additional funding will be available on acceptable terms, or at all. We have no committed source of additional capital and our stock price has faced extreme volatility and has declined. To the extent that we raise additional capital through the sale of equity or convertible debt securities or to the extent that we may issue equity securities in connection with a strategic transaction, the ownership interest of our stockholders will be diluted. If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of our product candidates or other research and development initiatives. Our license agreements may also be terminated if we are unable to meet the payment obligations under the agreements. We could be required to seek collaborators for our product candidates at an earlier stage than otherwise would be desirable or on terms that

are less favorable than might otherwise be available or relinquish or license on unfavorable terms our rights to our product candidates in markets where we otherwise would seek to pursue development or commercialization ourselves.

Any of the above events could significantly harm our business, prospects, financial condition and results of operations and cause the price of our common stock to decline.

We may fail to meet our publicly announced guidance or other expectations about our business, which would cause our stock price to decline.

We may provide guidance regarding our expected financial and business performance, such as projections regarding our cash runway. Correctly identifying key factors affecting business conditions and predicting future events is an inherently uncertain process and our guidance may not ultimately be accurate. Our guidance is based on certain assumptions relating to our expenses which may fluctuate based on how quickly we are able to execute on our operational initiatives, such as the timing of initiation of clinical trials and the rate of enrollment in such trials, and the timing of certain milestone payments, manufacturing expenses, employee expenses, facility expenses, and potential modifications of existing or the establishment of new partnership agreements. If our assumptions are not met or are impacted as a result of various risks and uncertainties, we may have to raise additional capital sooner than we currently expect and the market value of our common stock could decline significantly.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our CDMOs, contract research organizations (CROs), clinical trial sites and other contractors and consultants, could be subject to business disruptions, including those caused by earthquakes, power shortages, telecommunications failures, cybersecurity attacks, water shortages, floods, hurricanes, tsunamis, typhoons, fires, extreme weather conditions, medical epidemics or pandemics, wars and other geopolitical conflicts (such as Russia's military action against Ukraine and the Israel–Hamas conflict), bank failures, adverse legislative actions and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

Our ability to manufacture our product candidates could be disrupted if our operations or those of our suppliers are affected by a man-made or natural disaster or other business interruption. Our corporate headquarters and manufacturing facility are located in California near major earthquake faults and fire and flood zones. The ultimate impact on us, our significant suppliers and our general infrastructure of being located near major earthquake faults and fire and flood zones and being consolidated in certain geographical areas is unknown, but our operations and financial condition could suffer in the event of a major earthquake, fire, flood or other natural disaster.

Adverse developments affecting the financial services industry could adversely affect our current and projected business operations and our financial condition and results of operations.

Adverse developments that affect financial institutions, such as events involving liquidity that are rumored or actual, have in the past and may in the future lead to bank failures and market-wide liquidity problems. For example, on March 10, 2023, Silicon Valley Bank (SVB) was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation (FDIC) as receiver. Similarly, on March 12, 2023, Signature Bank and Silvergate Capital Corp. were each swept into receivership. In addition, on May 1, 2023, the FDIC seized First Republic Bank and sold its assets to JPMorgan Chase & Co. It is uncertain whether the U.S. Department of Treasury, FDIC and Federal Reserve Board will provide access to uninsured funds in the future in the event of the closure of other banks or financial institutions, or that they would do so in a timely fashion. We maintain the majority of our cash and cash equivalents in accounts at banking institutions in the United States that we believe are of high quality. Cash held in these accounts often exceed the FDIC insurance limits. If such banking institutions were to fail, we could lose all or a portion of amounts held in excess of such insurance limitations. In the event of failure of any of the financial institutions where we maintain our cash and cash equivalents, there can be no assurance that we would be able to access uninsured funds in a timely manner or at all. Any inability to access or delay in accessing these funds could adversely affect our business and financial position.

Although we assess our banking relationships as we believe necessary or appropriate, our access to cash in amounts adequate to finance or capitalize our current and projected future business operations could be significantly impaired by factors that affect the financial institutions with which we have banking relationships. These factors could include, among others, events such as liquidity constraints or failures, the ability to perform obligations under various types of financial, credit or liquidity agreements or arrangements, disruptions or instability in the financial services industry or financial markets, or

concerns or negative expectations about the prospects for companies in the financial services industry. These factors could also include factors involving financial markets or the financial services industry generally. The results of events or concerns that involve one or more of these factors could include a variety of material and adverse impacts on our current and projected business operations and our financial condition and results of operations. These could include, but may not be limited to, delayed access to deposits or other financial assets or the uninsured loss of deposits or other financial assets; or termination of cash management arrangements and/or delays in accessing or actual loss of funds subject to cash management arrangements.

In addition, widespread investor concerns regarding the U.S. or international financial systems could result in less favorable commercial financing terms, including higher interest rates or costs and tighter financial and operating covenants, or systemic limitations on access to credit and liquidity sources, thereby making it more difficult for us to acquire financing on acceptable terms or at all. Any decline in available funding or access to our cash and liquidity resources could, among other risks, adversely impact our ability to meet our operating expenses, financial obligations or fulfill our other obligations, result in breaches of our financial and/or contractual obligations or result in violations of federal or state wage and hour laws. Any of these impacts, or any other impacts resulting from the factors described above or other related or similar factors not described above, could have material adverse impacts on our liquidity and our current and/or projected business operations and financial condition and results of operations.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.*

Under current law, federal net operating losses incurred in tax years beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such federal net operating loss carryforwards in a taxable year is limited to 80% of taxable income in such year. Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, and corresponding provisions of state law, if a corporation undergoes an “ownership change” (generally defined as a greater than 50 percentage point change (by value) in the equity ownership of certain stockholders over a rolling three-year period), the corporation’s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income or taxes may be limited. As a result of our initial public offering (IPO) in October 2018 and private placements and other transactions that have occurred since our incorporation, we may have experienced an “ownership change”. We may also experience ownership changes in the future as a result of subsequent shifts in our stock ownership. We anticipate incurring significant additional net losses for the foreseeable future, and our ability to utilize net operating loss carryforwards associated with any such losses to offset future taxable income may be limited to the extent we incur future ownership changes. In addition, at the state level, there may be periods during which the use of net operating loss carryforwards is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. As a result, we may be unable to use all or a material portion of our net operating loss carryforwards and other tax attributes, which could adversely affect our future cash flows. For example, California imposed limits on the usability of California state net operating losses to offset taxable income in tax years beginning after 2023 and before 2027.

Risks Related to Our Business and Industry

Our product candidates are based on novel technologies, which makes it difficult to predict the time and cost of product candidate development and the likelihood of obtaining regulatory approval.*

We have concentrated our research, development and manufacturing efforts on our engineered allogeneic T cell therapy and our future success depends on the successful development of this therapeutic approach. We are in the early stages of developing our platform and we have experienced significant development challenges, such as with the prior clinical hold by the FDA, and there can be no assurance that any development problems we have now or experience in the future will not cause significant delays or unanticipated costs, or that such development problems can be overcome. We may also experience delays in developing a sustainable, reproducible and scalable manufacturing process or transferring that process to commercial facilities or partners, which may prevent us from completing our clinical studies or commercializing our products on a timely or profitable basis, if at all.

In addition, since we are in the early stages of clinical development, we do not know all the doses to be evaluated in pivotal trials or, if approved, commercially. Finding a suitable dose for our cell therapy product candidates as well as ALLO-647 may delay our anticipated clinical development timelines. These unknowns and other emerging findings from our clinical trials may result in protocol amendments, which may result in additional costs and may also delay our anticipated clinical development timelines. In addition, our expectations with regard to our scalability and costs of manufacturing may vary significantly as we develop our product candidates and understand these critical factors.

We are also advancing product candidates against unexplored targets and with new technology. For example, in our TRAVERSE trial we are advancing ALLO-316 against a target, CD70. ALLO-316 may have limited efficacy, even accounting

for the selection of patients with CD70 positive tumors, or have off-target toxicities. Since CD70 is found on activated T and other immune cells, ALLO-316 may also cause fratricide resulting in the loss of ALLO-316 cells, either during the ALLO-316 manufacturing process or after ALLO-316 is administered to patients, or may deplete host T or other immune cells.

CAR T administration and/or the lymphodepletion that is required before administration of CAR T cells, may increase the risk of prolonged blood cell count suppression (cytopenia) or other adverse events including infections or inflammatory conditions such as cytokine release syndrome (CRS), immune effector cell-associated neurotoxicity syndrome (ICANS), and/or immune effector cell-associated hemophagocytic lymphohistiocytosis-like syndrome (IEC-HS), which can be life-threatening and results in death. These events have been observed in our clinical trials and have resulted in pausing enrollment or requiring protocol amendments. For example, in our ongoing ALLO-316 TRAVERSE trial, we implemented risk mitigation measures for IEC-HS, which delayed and increased the cost of conducting the clinical trial.

In our ALPHA3 trial, we are advancing cema-cel for the treatment of patients with LBCL who have completed R-CHOP and have attained a remission, but who still test positive for minimal residual disease (MRD). As part of this trial, under Investigational Device Exemption (IDE), we plan to use an investigational assay developed by Foresight Diagnostics to determine if a patient is MRD positive. There is a risk that the assay may not function as intended and that the assay may not be sufficiently sensitive to detect the presence of low levels of MRD or sufficiently specific to avoid unacceptable rates of false positives. In addition, there are logistical risks with collecting and sending patient samples to Foresight Diagnostics for testing, and there is a risk that the MRD assay will not be timely performed on the patient samples. If the MRD assay does not function as intended or is not timely performed on patient samples, it could negatively impact the rate of enrollment or the clinical results of the ALPHA3 trial. In addition, we are reliant on Foresight Diagnostics to perform MRD testing. A delay or failure by Foresight Diagnostics to perform MRD testing may negatively impact our ability to conduct ALPHA3 trial as planned, or prevent us from conducting ALPHA3 trial.

The clinical study requirements of the FDA, European Medicines Agency (EMA) and other comparable foreign regulatory authorities and the criteria these regulators use to determine the safety and efficacy of a product candidate are determined according to the type, complexity, novelty and intended use and market of the potential products. The regulatory approval process for novel product candidates such as ours can be more complex and consequently more expensive and take longer than for other, better known or extensively studied pharmaceutical or other product candidates. For example, the regulatory approval process for cema-cel based on our ALPHA3 trial is more complex because it incorporates a companion diagnostic. We also face additional challenges in obtaining regulatory approval for ALLO-647, which we use as part of our lymphodepletion regimen, and for which we would seek to obtain approval concurrently with approval of a CAR T cell product candidate. Approvals by the European Commission and FDA for existing autologous CAR T therapies, such as Kymriah and Yescarta, may not be indicative of what these regulators may require for approval of our therapies. Also, the use of healthy donor material in our allogeneic CAR T product candidates may create product variability challenges for us, and we do not yet fully understand the impact of donor variability on clinical outcomes.

More generally, approvals by any regulatory agency may not be indicative of what any other regulatory agency may require for approval or what such regulatory agencies may require for approval in connection with new product candidates. Moreover, our product candidates may not perform successfully in clinical trials or may be associated with adverse events that distinguish them from the autologous CAR T therapies that have previously been approved. For instance, allogeneic product candidates may result in graft-versus-host disease (GvHD) or chromosomal abnormalities not experienced with autologous products. Additionally, any Phase 2 trial results, such as in the ALPHA3 trial, may not be representative of Phase 1 results, which were based on limited patients and a patient population in an advanced stage or LBCL, and such Phase 2 trial results may not be accepted by the FDA as pivotal and sufficient for cema-cel approval, and additional trials may be required to establish that cema-cel is safe and effective. Even if we collect promising initial clinical data of our product candidates, longer-term data may reveal new adverse events or responses that are not durable. Unexpected clinical outcomes would significantly impact our business.

Our business is highly dependent on the success of our lead product candidates. If we are unable to advance clinical development, obtain approval of and successfully commercialize our lead product candidates for the treatment of patients in approved indications, our business would be significantly harmed.*

Our business and future success depends on our ability to advance clinical development, obtain regulatory approval of, and then successfully commercialize, our lead product candidates. Because cema-cel, ALLO-316 and our B-cell maturation antigen (BCMA) program candidates are among the first allogeneic products to be evaluated in the clinic, the failure of any such product candidates, or the failure of other allogeneic T cell therapies, including for reasons due to safety, efficacy or durability, may impede our ability to develop our product candidates, and significantly influence physicians' and regulators'

opinions in regard to the viability of our entire pipeline of allogeneic T cell therapies. For instance, all of our clinical trials were previously put on clinical hold due to an observation in the ALPHA2 trial. While the clinical hold has been resolved, we could be subject to a clinical hold in the future due to unexpected observations, adverse patient outcomes or other issues.

All of our product candidates, including our lead product candidates, will require additional clinical and non-clinical development, regulatory review and approval in multiple jurisdictions, substantial investment, access to sufficient commercial manufacturing capacity and significant marketing efforts before we can generate any revenue from product sales. In addition, because our other product candidates are based on similar technology as our lead product candidates, if any of the lead product candidates encounters additional safety issues, efficacy problems, manufacturing problems, developmental delays, regulatory issues or other problems, our development plans and business would be significantly harmed.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the U.S. or abroad. The policies of the FDA, the competent authorities of the European Union Member States (EU Member States), the EMA, the European Commission and other comparable regulatory authorities responsible for clinical trials may change and additional government regulations may be enacted. For instance, the regulatory landscape related to clinical trials in the European Union recently evolved. The European Union Clinical Trials Regulation (CTR), which was adopted in April 2014 and repeals the European Union Clinical Trials Directive, became applicable on January 31, 2022. The CTR allows sponsors to make a single submission to both the competent authority and an ethics committee in each EU Member State, leading to a single decision for each EU Member State. The assessment procedure for the authorization of clinical trials has been harmonized as well, including a joint assessment by all EU Member States concerned, and a separate assessment by each EU Member State with respect to specific requirements related to its own territory, including ethics rules. Each EU Member State's decision is communicated to the sponsor via the centralized European Union portal. Once the clinical trial approved, clinical study development may proceed. The CTR foresees a three-year transition period. The extent to which ongoing and new clinical trials will be governed by the CTR varies. The CTR will apply to clinical trials from an earlier date if the related clinical trial application was made on the basis of the CTR or if the clinical trial has already transitioned to the CTR framework before January 31, 2025. Compliance with the CTR requirements by us and our third-party service providers, such as CROs, may impact our developments plans.

Our product candidates may cause undesirable side effects or have other properties that have halted and could in the future halt their clinical development, prevent their regulatory approval, limit their commercial potential or result in significant negative consequences.*

Future undesirable or unacceptable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authorities. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Approved autologous CAR T therapies and those under development have shown frequent rates of CRS, neurotoxicity, serious infections, prolonged cytopenia and hypogammaglobulinemia, hemophagocytic lymphohistiocytosis/macrophage activation syndrome (HLH/MAS) and adverse events have resulted in the death of patients. We have observed certain of these adverse events for our allogeneic CAR T product candidates. Other adverse events could also emerge in autologous CAR T therapies over time. For instance, patients who received an autologous anti-BCMA CAR T cell therapy have experienced neurocognitive and hypokinetic movement disorder with features of Parkinson's disease that emerged months after treatment and may have been due to BCMA expression within the brain. Our anti-BCMA product candidates have the risk of causing similar adverse events.

In January 2024 the FDA sent letters to all companies with approved autologous CAR T therapies requesting them to add a black box warning on the label of their autologous CAR T therapies. The FDA is requiring label updates to include a black box warning that T-cell malignancies may occur following treatment with BCMA- and CD19-directed genetically modified autologous T-cell immunotherapies. The required warnings are specific to autologous therapies. Such T-cell malignancies have been observed in approximately 1 patient for every 1,000 patients treated with autologous therapies. Because our allogeneic therapies are based on similar technology, until we have treated more patients, there is a risk that we may find similar T-cell malignancies following treatment with our allogeneic CAR T product candidates. If such malignancies are observed, regulatory authorities, such as the FDA, may require a similar black box warning or other safety-related labeling statements on our products' label, if approved, which could prevent us from achieving or maintaining market acceptance and adversely affect our business, financial condition, results of operations and prospects.

Our allogeneic CAR T cell product candidates may also cause unique adverse events related to the differences between the donor and patients, such as GvHD or infusion reactions. In addition, we utilize a lymphodepletion regimen, which generally includes fludarabine, cyclophosphamide and ALLO-647, that may cause serious adverse events. For instance, because the

regimen will cause a transient and sometimes prolonged immune suppression, patients will have an increased risk of infection that may be unable to be cleared by the patient and ultimately lead to other serious adverse events or death. Our lymphodepletion regimen has caused and may also cause prolonged cytopenia and aplastic anemia. We are also exploring various dosing strategies for lymphodepletion in our clinical trials, such as including varying doses of the chemotherapy agents and/or ALLO-647 or eliminating one or more of the agents, which may alter the risk of serious adverse events or have other undesirable outcomes such as a reduction of the efficacy of treatment.

In our and Servier's clinical trials of allogeneic CAR T product candidates, the most common severe or life-threatening adverse events resulted from CRS, serious infections, febrile neutropenia, prolonged cytopenia including prolonged pancytopenia, haemophagocytic lymphohistiocytosis, hypokalemia, multiple organ dysfunction syndrome, neutropenic sepsis and aplastic anemia. As reported, patients have died from adverse events and future patients may also experience toxicity resulting in death. For additional safety data, please see the section entitled "Business—Product Pipeline and Development Strategy" included in our Annual Report.

As we treat and re-treat more patients with our product candidates in our clinical trials, new less common side effects may also emerge or increased incidence of previously observed side effects may occur. There is a risk that the FDA or other comparable foreign regulatory authorities may not agree that sufficient mitigating procedures are included in our protocols to address such side effects, and FDA or other comparable foreign regulatory authorities may impose a clinical hold as it evaluates risks associated with such side effects and/or as we work with the agency to implement protocol amendments to appropriately manage such side effects. For instance, we observed a chromosomal abnormality that led to a previous clinical hold on our clinical trials. While our investigation concluded that the chromosomal abnormality had no clinical significance and was unrelated to our manufacturing process, our manufacturing processes include gene engineering by using viral vectors and genomic nucleases that may in the future cause insertion, deletion, or chromosomal translocation that may result in allogeneic CAR T cells to proliferate uncontrollably and adverse events. In addition, we have observed liver enzyme elevations, including one adverse event – autoimmune hepatitis – that qualified as a dose-limiting toxicity in our TRAVERSE trial.

We may also combine the use of our product candidates with other investigational therapies that may cause separate adverse events or events related to the combination.

If unacceptable toxicities arise in the development of our product candidates, we could suspend or terminate our trials or the FDA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all targeted indications. Any data safety monitoring board may also suspend or terminate a clinical trial at any time on various grounds, including a finding that the research patients are being exposed to an unacceptable health risk, including risks inferred from other unrelated immunotherapy trials. Treatment-related side effects could also affect patient recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff, as toxicities resulting from T cell therapy are not normally encountered in the general patient population and by medical personnel. We have trained and expect to have to train medical personnel using CAR T cell product candidates to understand the side effect profile of our product candidates for both our clinical trials and upon any commercialization of any of our product candidates. Inadequate training in recognizing or managing the potential side effects of our product candidates could result in patient deaths. Any of these occurrences may harm our business, financial condition and prospects significantly.

Our clinical trials may fail to demonstrate the safety and efficacy of any of our product candidates, which would prevent or delay regulatory approval and commercialization.*

Before obtaining regulatory approvals for the commercial sale of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are both safe and effective for use in each target indication. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of later-stage clinical trials, including in any post-approval studies.

There is typically an extremely high rate of attrition from the failure of product candidates proceeding through clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy, insufficient durability of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that commence clinical trials are never approved as products.

In addition, for any trials that may be completed, we cannot guarantee that the FDA or comparable foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. For example, FDA may determine that results from our Phase 2 ALPHA3 trial are not sufficient to establish that cema-cel is safe and effective, and FDA may require additional trials. To the extent that the results of the trials are not satisfactory to the FDA or comparable foreign regulatory authorities for support of a marketing application, approval of our product candidates may be significantly delayed, or we may be required to expend significant additional resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates.

Phase 1 data from our clinical trials is limited and may change as more patient data becomes available or may not be validated in any future or advanced clinical trial.*

Data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data becomes available. Phase 1 results are preliminary in nature and should not be viewed as predictive of ultimate success. It is possible that such results will not continue or may not be repeated in any clinical trial of our product candidates. For instance, our Phase 2 ALPHA3 trial design is based in part on Phase 1 data from a limited number of patients treated with various doses of ALLO-501 or cema-cel manufactured using the Alloy process, and the larger Phase 2 ALPHA3 trial, which we anticipate will only include cema-cel manufactured internally at CF1, but may ultimately also include cema-cel manufactured at a contract manufacturer, may not be consistent with the Phase 1 results. Furthermore, because ALPHA3 will include a different patient population versus our Phase 1 ALPHA2 trial, i.e., patients having MRD after front-line treatment versus patients with radiographically measurable disease after a minimum of two prior lines of treatment, it is possible that cema-cel may behave differently in terms of expansion, persistence and the ability to eradicate residual disease. In addition, our experience with our CD19 and BCMA programs indicates that manufacturing can impact clinical outcomes. The manufacturing runs we have completed and tested in the clinic are limited across our product candidates and any manufacturing variability that impacts clinical outcomes would significantly harm our business and prospects. We may also fail to develop any optimized manufacturing processes for any of our programs. Ultimately, if we cannot manufacture our product candidates with consistent and reproducible product characteristics, our ability to develop and commercialize any product candidate would be significantly impacted.

Phase 1 trials of novel products also commonly include a dose exploration phase during which adverse effects of treatment may emerge at higher doses that are new, unexpected, or occur at higher-than-expected frequencies or severity and may limit our ability to develop such products in one or more target indications or patient populations. Similarly, in dose expansion phase, we may discover that adverse effects, either known or novel, may negatively impact the emerging overall benefit-risk profile of our product candidates and may lead to the discontinuation or other significant alteration to the development plan.

Preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, initial, interim and preliminary data should be viewed with caution until the final data are available. Adverse differences between preliminary or interim data and final data could significantly harm our business prospects.

We may not be able to submit INDs or equivalent foreign applications to commence additional clinical trials on the timelines we expect, and even if we are able to, the FDA or other comparable foreign regulatory authorities may not permit us to proceed.*

We plan to submit INDs or IND amendments and equivalent foreign applications for additional product candidates or indications in the future. We cannot be sure that submission of an IND or IND amendment or an equivalent foreign application will result in the FDA or other comparable foreign regulatory authorities allowing testing and clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such clinical trials. The manufacturing of allogeneic CAR T cell therapy remains an emerging and evolving field. Accordingly, we expect Chemistry, Manufacturing and Controls (CMC) related topics, including product specification, will be a focus of IND reviews, which may delay the clearance of INDs or IND amendments. For instance, if we introduce changes to the manufacturing of our product candidates, regulatory authorities may require additional studies or clinical data to support the changes, which could delay our clinical trial timelines. Additionally, even if such regulatory authorities agree with the design and implementation of the clinical trials set forth in an IND, IND amendment or clinical trial application, we cannot guarantee that such regulatory authorities will not change their requirements in the future.

In addition, we have an open IND for ALLO-647, which is being used as part of lymphodepletion in all our clinical trials. Any regulatory issues related to ALLO-647 or to the development of ALLO-647, if it is used as part of a

lymphodepletion regimen in a clinical study, could delay such study and delay the development of our allogeneic CAR T cell product candidates and significantly affect our business.

We may encounter substantial delays in our clinical trials, or may not be able to conduct our trials on the timelines we expect.*

Clinical testing is expensive, time consuming and subject to uncertainty. We cannot guarantee that any clinical studies will be conducted as planned or completed on schedule, if at all. Even if our trials begin as planned, issues may arise that could suspend or terminate such clinical trials. A failure of one or more clinical studies can occur at any stage of testing, and our future clinical studies may not be successful. Events that may prevent successful or timely completion of clinical development include:

- inability to generate sufficient preclinical, toxicology or other in vivo or in vitro data to support the initiation of clinical studies;
- delays in sufficiently developing, characterizing, controlling or optimizing a manufacturing process suitable for clinical trials, including the validation and deployment of release assays;
- difficulty sourcing healthy donor material of sufficient quality and in sufficient quantity to meet our development needs;
- delays in developing, obtaining regulatory approval for, or implementing suitable assays for screening patients for eligibility for trials with respect to certain product candidates;
- the screen failure rate for clinical trials of our product candidates may be higher than we anticipate, requiring us to screen larger numbers of patients than originally planned, for example, the number of patients who have MRD at the end of front-line treatment in ALPHA3 may be lower than we expect;
- delays in reaching a consensus with regulatory agencies on study design;
- delays in reaching agreement on acceptable terms with prospective CROs and clinical study sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical study sites;
- delays in obtaining required IRB approval or approval of other ancillary regulatory committees at each clinical study site;
- imposition of a temporary or permanent clinical hold by regulatory agencies for a number of reasons, including after review of an IND application or amendment, or equivalent application or amendment; as a result of a new safety finding that presents uncertain or unreasonable risk to clinical trial participants; a negative finding from an inspection of our or our collaborator's clinical study operations or our study sites; developments on trials conducted by competitors for related technology that raises FDA or other comparable foreign regulatory authority concerns about risk to patients of the technology broadly; or if the FDA or other comparable foreign regulatory authorities find that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- delays in recruiting suitable patients to participate in our clinical studies;
- difficulty collaborating with patient groups and investigators;
- failure by our CROs, other third parties or us to adhere to clinical study requirements;
- failure to perform in accordance with the FDA's good clinical practices (GCP) requirements or equivalent regulatory guidelines in other countries;
- delays or failures in the transfer of manufacturing processes to any CDMO or our own manufacturing facility or any other development or commercialization partner for the manufacture of product candidates;
- delays in having patients complete participation in a study or return for post-treatment follow-up;
- patients dropping out of a study;
- occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- the cost of clinical studies of our product candidates being greater than we anticipate;
- clinical studies of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical studies or abandon product development programs;
- delays or failure to secure supply agreements with suitable raw material suppliers, or any failures by suppliers to meet our quantity or quality requirements for necessary raw materials;

- shortage, interruption, or failure to secure commercially available and/or investigational drug products that are required to conduct clinical trials with our allogeneic CAR T product candidates; and
- delays in manufacturing, testing, releasing, validating, or importing/exporting sufficient stable quantities of our product candidates for use in clinical studies or the inability to do any of the foregoing.

A pandemic or epidemic may also increase the risk of certain of the events described above and delay our development timelines. Any inability to successfully complete preclinical and clinical development could result in additional costs to us or impair our ability to generate revenue. In addition, in order to transition manufacturing of certain of our product candidates from our CDMO to our manufacturing facility, we will be required to meet certain regulatory conditions, such as establishing comparability with the product candidates manufactured at our CDMO, and our inability to meet such conditions would result in investment of additional resources, a delay in using our manufacturing facility for production and extend our clinical trial timelines. Similar conditions may apply if we make manufacturing or formulation changes to our product candidates. Clinical study delays could also shorten any periods during which our products have patent protection and may allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business and results of operations.

Our clinical trials may also be delayed because of the availability of drugs required to be used under our protocols. For example, in some of our clinical trials, the study participants receive commercially available drugs for lymphodepletion before our allogeneic CAR T product candidates are administered, and receive other drugs to prevent infections and manage the treatment emergent adverse events. Shortage or lack of availability of these commercially available drugs that are necessary to conduct our clinical trials may cause delays in our clinical trials.

Monitoring and managing toxicities in patients receiving our product candidates is challenging, which could adversely affect our ability to obtain regulatory approval and commercialize.*

For our clinical trials of our product candidates, we contract or will contract with academic medical centers and hospitals experienced in the assessment and management of toxicities arising during clinical trials. Nonetheless, these centers and hospitals may have difficulty observing patients and treating toxicities, which may be more challenging due to personnel changes, inexperience, shift changes, house staff coverage or related issues. This could lead to more severe or prolonged toxicities or even patient deaths, which could result in us or the FDA or other comparable foreign regulatory authorities delaying, suspending, varying, or terminating one or more of our clinical trials, and which could jeopardize regulatory approval. We also expect the centers using our product candidates, if approved, on a commercial basis could have similar difficulty in managing adverse events. Medicines used at centers to help manage adverse side effects of our product candidates may not adequately control the side effects and/or may have a detrimental impact on the efficacy of the treatment. Challenges associated with the use of these medicines may increase with new physicians and centers administering our product candidates.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.*

We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons. For example, as we progress the ALPHA2 CLL cohort, ALPHA3 and TRAVERSE trials, we may face enrollment challenges, including an unwillingness of sites or patients to participate, the exclusion of patients with certain disease characteristics or the ineligibility of patients that have received prior autologous CAR T therapies, which continue to gain adoption. The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients. Because we anticipate a minority of the 1L patients we will test for MRD as part of screening for the ALPHA3 trial will be MRD positive, we will likely experience a very high screen failure rate, which will require screening a large number of patients to complete enrollment in the study. Because of the anticipated high screen failure rate, certain clinical trial sites may decline to participate in ALPHA3 or completion of enrollment may be significantly delayed. Future epidemics or pandemics may result in reduced enrollment and challenges to related clinical trial activities. The enrollment of patients may be more difficult, such as due to the perceptions of the safety of our clinical trials due to the previous clinical hold, and will depend on many factors, including:

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity of patients to study sites;
- the design of the trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- our ability to obtain and maintain patient consents;

- the competition from approved products in the same or other lines of therapy and and/or disease indications and from product candidates in other clinical trials; and
- the risk that patients enrolled in clinical trials will drop out of the trials before the infusion of our product candidates or trial completion.

Since we only need to conduct a limited number of manufacturing runs to generate clinical supply, the diversity of our supply is limited during clinical trials. As a result, some patients may have antibodies to certain donor specific antigens at titers that could negatively impact the activity of our product candidates and which would render the patients ineligible for treatment. Furthermore, cellular mechanisms of allogeneic tissue rejection may limit the efficacy of our products. In addition, we have introduced an in vitro companion diagnostic (IVD) assay in the TRAVERSE trial to screen for patients with CD70+ tumors and will utilize an MRD assay in the ALPHA3 trial to screen for patients who are MRD positive, both of which are restricting or will restrict the number of patients eligible for the trials.

Development and research use of an experimental diagnostic assay or test, such as that we are using to determine CD70 expression on tumor tissue of potential participants in the TRAVERSE trial or to identify MRD positive patients in the ALPHA3 trial, may influence results of the study in expected or unexpected ways. For example, emerging safety and efficacy outcomes could lead us to impose, tighten or expand “cutoff” values of CD70 expression to determine enrollment eligibility for TRAVERSE. Assay performance or necessary changes we or our partners make to the assay(s) during development may reduce the pace of enrollment or may lead to alterations in the expected benefit risk profile as compared to results collected prior to the change. The diagnostic assay itself may not perform as expected due to identifiable or obscure factors. It is also possible that we may not be aware of such underperformance of the assay which could lead to incorrect conclusions. This could, in turn, impact enrollment and interpretation of the clinical trial results.

Our clinical trials will also compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition will reduce the number and types of patients available to us because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. For example, our collaboration with Foresight Diagnostics is nonexclusive. As a result, there is a risk that Foresight Diagnostics might work with our competitors to enable a competing clinical trial involving the same MRD positive patient population that we plan to enroll in ALPHA3, which would reduce the number of patients who are available to participate in ALPHA3, and potentially delay completion of ALPHA3. Since the number of qualified clinical investigators is limited, some of our clinical trial sites are also being used by some of our competitors, which may reduce the number of patients who are available for our clinical trials in that clinical trial site.

As our clinical trials require conditioning patients with chemotherapy, including agents such as cyclophosphamide and fludarabine, and physicians use other drugs prophylactically or to manage adverse events, our ability to enroll may be impacted by the shortage of such agents or drugs. For instance, the FDA has reported a shortage of fludarabine and any failure or delays by us or by our clinical trial sites to obtain sufficient quantities of fludarabine may delay our ability to enroll and treat patients in our clinical trials.

Moreover, because our product candidates represent a departure from more commonly used methods for cancer treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy, monoclonal antibodies, hematopoietic cell transplantation as well as autologous CAR T cell therapies, rather than enroll patients in our clinical trial, including if our product candidates have or are perceived to have additional safety or efficacy risks or if using our product candidates may affect insurance coverage of conventional therapies. For instance, the development of autologous CAR T cell therapies continues to rapidly advance, including into earlier lines of treatment of LBCL and treatment of relapsed/refractory (R/R) multiple myeloma, as described under the section entitled "Business—Competition" included in our Annual Report. We also may experience risks associated with a new class of therapies, bispecific antibodies, which have been approved for multiple myeloma and LBCL. The compelling results and related approvals impact our ability to enroll patients with R/R multiple myeloma or LBCL in our clinical trials. Moreover, patients eligible for allogeneic CAR T cell therapies but ineligible for autologous CAR T cell therapies due to aggressive cancer and inability to wait for autologous CAR T cell therapies may be at greater risk for complications and death from therapy or may experience a reduction in efficacy as compared to patients who are well enough and whose disease is sufficiently slow growing as to be eligible for autologous CAR T cell therapy.

Delays in patient enrollment may result in increased costs or may affect the timing or outcome of our clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our product candidates.

The market opportunities for certain of our product candidates may be limited to those patients who are ineligible for or have failed prior treatments and may be small.

The FDA often approves new therapies initially only for use in patients with R/R metastatic disease. We may initially seek approval of certain of our product candidates in this setting. Subsequently, for those products that prove to be sufficiently beneficial, if any, we would expect to seek further approval in earlier lines of treatment, and for cema-cel we expect to initially seek approval in the first line consolidation setting. There is no guarantee that our product candidates, even if approved, would be approved for earlier lines of therapy, and, prior to any such approvals, we will have to conduct additional clinical trials, including potentially comparative trials against the then-current standard of care, which in some cases may include comparative trials against approved therapies. We may also target a similar patient population as autologous CAR T product candidates, including approved autologous CAR T products. Our therapies may not be as safe and effective as autologous CAR T therapies and may only be approved for patients who are ineligible for autologous CAR T therapy.

Our projections of both the number of patients who have the cancers we are targeting, as well as the subset of patients with these cancers who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research and may prove to be incorrect. Further, new studies or therapies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be lower than expected. Additionally, the potentially addressable patient population for our product candidates may be limited, such as due to the eligibility criteria of our trials, or may not be amenable to treatment with our product candidates.

We may fail to successfully manufacture our product candidates, operate our own manufacturing facility, or obtain regulatory approval to utilize or commercialize from our manufacturing facility or at a CDMO, which could adversely affect our clinical trials and the commercial viability of our product candidates.*

We may not be able to achieve clinical or commercial manufacturing of our products on our own or at a CDMO, including the inability to satisfy demands for any of our product candidates. We have limited experience in managing the allogeneic T cell engineering process, and our allogeneic processes may be more difficult or more expensive than the approaches taken by our competitors. Until we complete our clinical trials, we cannot be sure that the manufacturing processes employed by us or the technologies that we incorporate for manufacturing will result in consistent T cell production that will be safe and effective.

We operate a manufacturing facility located in Newark, California that is designed to support our clinical trials and potential commercial production and worldwide distribution of allogeneic CAR T cell products for blood cancers, solid tumors and autoimmune diseases. Introducing any product manufactured at our manufacturing facility into an ongoing clinical trial would be subject to FDA review, and may result in increased costs and delays in conducting such trial, submitting a biologics license application (BLA) and/or gaining FDA or other comparable foreign regulatory authority approval. Similar conditions may apply if we make process changes to our product candidates, as we plan to do for our BCMA program. In addition, any process or raw material change could introduce unacceptable product variability and impact our ability to manufacture on a consistent and reproducible basis. Ultimately, any failure or delays in manufacturing and qualification of our product candidates at our CDMO or at our own manufacturing facility could delay our clinical trials.

We do not yet have sufficient information to reliably estimate the cost of the commercial manufacturing of our product candidates, and the actual cost to manufacture our product candidates could materially and adversely affect the commercial viability of our product candidates. The commercial dose and treatment regimen may affect our ability to scale and will affect our cost per dose. For instance, because our anti-BCMA product candidates may require a higher dose than cema-cel, it is possible that it may be more difficult to scale production of our anti-BCMA product candidates to meet demand. As a result, we may never be able to develop a commercially viable product. Our manufacturing facility will also require FDA approval, and possibly similar approval from comparable foreign regulatory authorities before it can be used for commercial production, which we may never obtain. Even if approved, we would be subject to ongoing periodic unannounced inspection by the FDA, EMA, the Drug Enforcement Administration and corresponding state agencies to ensure strict compliance with current good manufacturing practices (cGMP), and other government regulations.

The manufacture of biopharmaceutical products is complex and requires significant expertise, including the development of advanced manufacturing techniques and process controls. Manufacturers of cell therapy products often encounter difficulties in production, particularly in validating initial production and ensuring the absence of contamination. Other problems can include difficulties with production costs and yields, quality control, including stability of the product, operator error, shortages of qualified personnel, as well as compliance with strictly enforced federal, state and foreign regulations. The application of new regulatory guidelines or parameters, such as those related to release testing, may also

adversely affect our ability to manufacture our product candidates. Furthermore, if contaminants are discovered in our supply of product candidates or in the manufacturing facilities, such supply may have to be discarded and our manufacturing facility may need to be closed for an extended period of time to investigate and remedy the contamination. We cannot assure you that any stability or other issues relating to the manufacture of our product candidates will not occur in the future.

We or any of our vendors may fail to manage the logistics of storing and shipping our raw materials and product candidates. Storage failures and shipment delays and problems caused by us, our vendors or other factors not in our control, such as weather, could result in the inability to manufacture product, the loss of usable product or prevent or delay the delivery of product candidates to patients.

We may also experience manufacturing difficulties due to resource constraints or as a result of labor disruptions, such as due to a future pandemic, epidemic or disputes. If we were to encounter any of these difficulties, our ability to provide our product candidates to patients would be jeopardized.

As a company, we have no experience in marketing products. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, we may not be able to generate product revenue.

As a company, we have no experience in marketing products. We intend to develop an in-house marketing organization and sales force, which will require significant capital expenditures, management resources and time. We will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train and retain marketing and sales personnel.

If we are unable or decide not to establish internal sales, marketing and distribution capabilities, we will pursue collaborative arrangements regarding the sales and marketing of our products; however, there can be no assurance that we will be able to establish or maintain such collaborative arrangements, or if we are able to do so, that they will have effective sales forces or be on favorable terms. Any revenue we receive will depend upon the efforts of such third parties, which may not be successful. We may have little or no control over the marketing and sales efforts of such third parties and our revenue from product sales may be lower than if we had commercialized our product candidates ourselves. We also face competition in our search for third parties to assist us with the sales and marketing efforts of our product candidates.

There can be no assurance that we will be able to develop in-house sales and distribution capabilities or establish or maintain relationships with third-party collaborators to commercialize any product that receives regulatory approval in the United States or in other markets.

A variety of risks associated with conducting research and clinical trials abroad and marketing our product candidates internationally could materially adversely affect our business.*

We plan to globally develop our product candidates. Accordingly, we expect that we will be subject to additional risks related to operating in foreign countries, including:

- differing regulatory requirements in foreign countries;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements;
- differing standards and privacy requirements for the conduct of clinical trials;
- increased difficulties in managing the logistics and transportation of storing and shipping product candidates produced in the United States, shipping the product candidate to the patient abroad, and shipping patient samples to the United States for screening tests;
- import and export requirements and restrictions;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- differing payor reimbursement regimes, governmental payors or patient self-pay systems, and price controls;

- potential liability under the Foreign Corrupt Practices Act of 1977 or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad;
- challenges with obtaining any local supply of drugs or agents used with our product candidates, which are required by certain local clinical trial sites before conducting any study; and
- business interruptions resulting from future health epidemics or pandemics, or natural or man-made disasters, including earthquakes, tsunamis, fires or other medical epidemics, or geo-political actions, including war and terrorism.

These and other risks associated with our collaborations with Servier and Cellectis, each based in France, our collaboration with Notch, based in Canada, and our joint venture for China, Taiwan, South Korea and Singapore with HBP, may materially adversely affect our ability to attain or maintain profitable operations.

We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The biopharmaceutical industry, and the immuno-oncology industry specifically, is characterized by intense competition and rapid innovation. Our competitors may be able to develop other compounds or drugs that are able to achieve similar or better results. Our potential competitors include major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies and universities and other research institutions. Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations and well-established sales forces. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors, either alone or with collaborative partners, may succeed in developing, acquiring or licensing on an exclusive basis drug or biologic products that are more effective, safer, more easily commercialized or less costly than our product candidates or may develop proprietary technologies or secure patent protection that we may need for the development of our technologies and products.

Specifically, engineered T cells face significant competition from multiple companies. Success of other therapies could impact our regulatory strategy and delay or prevent regulatory approval of our product candidates. Even if we obtain regulatory approval of our product candidates, the availability and price of our competitors' products could limit the demand and the price we are able to charge for our product candidates. We may not be able to implement our business plan if the acceptance of our product candidates is inhibited by price competition or the reluctance of physicians to switch from existing methods of treatment to our product candidates, or if physicians switch to other new drug or biologic products or choose to reserve our product candidates for use in limited circumstances. For additional information regarding our competition, see the section entitled "Business—Competition" included in our Annual Report.

We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.*

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract and retain highly qualified managerial, scientific, medical and other personnel. We are highly dependent on our management, including our Executive Chair, our President and Chief Executive Officer, our Executive Vice President, Research & Development and Chief Medical Officer, our Executive Vice President, Chief Technical Officer, our Chief Financial Officer, and our General Counsel. The loss of the services of any of our executive officers, other key employees, and other scientific and medical advisors, and our inability to find suitable replacements could result in delays in product development and harm our business.

We conduct substantially all of our operations at our facilities in the San Francisco Bay area. This region is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel in our market is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all. Attrition may lead to higher costs for hiring and retention, diversion of management time to address retention matters and disrupt the business.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided stock options and restricted stock unit (RSU) awards that vest over time or upon the achievement of certain key strategic goals. The value to employees of stock options and RSU awards that vest over time or upon achieving goals have been significantly affected by movements in our stock price that are beyond our control and may at any time be insufficient to counteract more lucrative offers from other companies. We completed an option exchange program in July 2022 to alleviate the significant number of employee options that were underwater at that time. Our stock price has significantly declined since the option exchange program and a significant number of our employee options remain underwater and may not provide the intended incentive for employees to remain at our company. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. Although we have employment agreements with our key employees, these employment agreements provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice. We do not maintain “key person” insurance policies on the lives of these individuals or the lives of any of our other employees. Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level and senior managers as well as junior, mid-level and senior scientific and medical personnel.

Our reduction in force undertaken to extend our cash runway and focus more of our capital resources on our prioritized research and development programs might not achieve our intended outcome.

In January 2024, our board of directors approved a reduction in force affecting approximately 22% of our workforce, in order to preserve cash and prioritize investment in our core clinical programs. The reduction in force may result in unintended consequences and costs, such as the loss of institutional knowledge and expertise, attrition beyond the intended number of employees, decreased morale among our remaining employees, and the risk that we may not achieve the anticipated benefits of the reduction in force. In addition, while positions have been eliminated, certain functions necessary to our operations remain, and we might not successfully distribute the duties and obligations of our terminated employees among our remaining employees. The reduction in workforce could also make it difficult for us to pursue, or prevent us from pursuing, new opportunities and initiatives due to insufficient personnel, or require us to incur additional and unanticipated costs to hire new personnel to pursue such opportunities or initiatives. If we are unable to realize the anticipated benefits from the reduction in force, or if we experience significant adverse consequences from the reduction in force, our business, financial condition and results of operations may be materially adversely affected.

The size of our workforce has fluctuated and we will need to manage the size of our organization as we continue to advance our product candidates.

As our development, manufacturing and commercialization plans and strategies develop, we have grown our employee base and allocated resources to multiple new functions, but in January 2024 we implemented a 22% reduction in force, and we will need to continue to manage the size of our organization to ensure that we can successfully execute our strategic plans. As our product candidates advance toward commercialization, we expect to hire employees in areas that include sales and marketing. Future growth imposes significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining and motivating additional employees;
- managing our internal development efforts effectively, including the clinical and FDA review process for our product candidates, while complying with our contractual obligations to contractors and other third parties; and
- improving our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to commercialize our product candidates will depend, in part, on our ability to effectively manage our growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants. There can be no assurance that the services of independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. We may also be subject to penalties or other liabilities if we mis-classify employees as consultants. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain regulatory approval of our product candidates or otherwise advance our business. There can be no assurance that we will be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, or at all.

If we are not able to effectively expand our organization by hiring and retaining employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop, manufacture and commercialize our product candidates and, accordingly, may not achieve our research, development, manufacturing and commercialization goals. Conversely, if we expand ahead of our business progress, we may take on unnecessary costs.

We may form or seek additional strategic alliances or enter into additional licensing arrangements in the future, and we may not realize the benefits of such alliances or licensing arrangements.

We may form or seek additional strategic alliances, create joint ventures or collaborations or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to our product candidates and any future product candidates that we may develop. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders or disrupt our management and business. In addition, we face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Moreover, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for our product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy. Any delays in entering into new strategic partnership agreements related to our product candidates could delay the development and commercialization of our product candidates in certain geographies for certain indications, which would harm our business prospects, financial condition and results of operations.

If we license products or new technologies or acquire businesses, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations and company culture. For instance, our agreements with Cellectis, Servier, Notch, Antion, and Foresight Diagnostics require significant research and development that may not result in the development and commercialization of product candidates. We cannot be certain that, following a strategic transaction or license, we will achieve the results, revenue or specific net income that justifies such transaction.

We may not realize the benefits of acquired assets or other strategic transactions.*

We actively evaluate various strategic transactions on an ongoing basis. We may acquire other businesses, products or technologies as well as pursue joint ventures or investments in complementary businesses. The success of our strategic transactions, including our acquisition of CAR T cell assets from Pfizer, licenses with Cellectis, Servier, Notch, Antion, our strategic collaboration with Foresight Diagnostics, and our joint venture with HBP and any future strategic transactions depends on the risks and uncertainties involved including:

- technical difficulties associated with advancing partnered programs;
- unanticipated liabilities related to acquired companies or joint ventures;
- difficulties integrating acquired personnel, technologies and operations into our existing business;
- retention of key employees;
- managerial challenges associated with the oversight of partnered programs;
- disagreements regarding each party's contractual rights and obligations under our partnership agreements;
- costs and uncertainties related to managing disputes with any strategic partners;
- increases in our expenses and reductions in our cash available for operations and other uses;
- inability of our strategic partners to access suitable capital;
- disruption in or termination of our relationships with collaborators or suppliers as a result of such a transaction; and
- possible write-offs or impairment charges relating to acquired businesses or joint ventures.

If any of these risks or uncertainties occur, we may not realize the anticipated benefit of any acquisition or strategic transaction.

Additionally, foreign acquisitions and joint ventures are subject to additional risks, including those related to integration of operations across different cultures and languages, currency risks, potentially adverse tax consequences of overseas operations and the particular economic, political and regulatory risks associated with specific countries. For instance, our joint venture with HBP has faced challenges relating to the regulatory and competitive environment in China for allogeneic CAR T products, as well as challenges within the capital markets for financing allogeneic CAR T development. Our joint venture may face manufacturing difficulties, such as from changes in raw materials or processes due to local regulations, or

delivering our licensed product candidates in China, Taiwan, South Korea or Singapore, which could prevent any development or commercialization of our licensed product candidates in the region. The joint venture will also require significant operational and financial support in the future by us or third parties, and any future financing of the joint venture would increase our expenses or dilute our ownership in the joint venture. We may also face unknown liabilities due to supporting our joint venture, such as due to any misuse of materials supplied to our joint venture.

Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities or amortization expenses or write-offs of goodwill, any of which could harm our financial condition.

If our security measures, or those of our CROs, CDMOs, collaborators, contractors, consultants or other third parties with whom we work, are or were compromised or the security, confidentiality, integrity or availability of our information technology, software, services, networks, communications or data is compromised, limited or fails, we could experience a material adverse impact.*

In the ordinary course of our business, we and the third parties with whom we work collect, process, receive, store, use, generate, transfer, disclose, make accessible, protect, secure, dispose of, transmit, and share (collectively, process) proprietary, confidential and sensitive information, including personal data (including health information), intellectual property, trade secrets, information we collect about patients in connection with clinical trials, and proprietary business information owned or controlled by ourselves or other parties (collectively, sensitive information). We work with certain third parties, such as CROs and CDMOs, to process our proprietary, confidential and sensitive information. We may also share or receive sensitive information with our partners, CROs, CDMOs, or other third parties. Our ability to monitor these third parties' information security practices is limited, and these third parties may not have adequate information security measures in place. If we (or a third party with whom we work) experience a security incident or are perceived to have experienced a security incident, we may also experience adverse consequences.

Cyberattacks, malicious internet-based activity, online and offline fraud and other similar activities threaten the confidentiality, integrity, and availability of our sensitive information and information technology systems, and those of the third parties with whom we work. Such threats are prevalent and are increasing in their frequency, sophistication and intensity, and have become increasingly difficult to detect. These threats come from a variety of sources, including traditional computer "hackers," "hacktivists," organized criminal threat actors, threat actors, personnel (such as through theft or misuse), sophisticated nation-states, and nation-state-supported actors. Some actors now engage and are expected to continue to engage in cyber-attacks, including without limitation nation-state actors for geopolitical reasons and in conjunction with military conflicts and defense activities. During times of war and other major conflicts, we, and the third parties with whom we work, may be vulnerable to a heightened risk of these attacks, including retaliatory cyber-attacks, that could materially disrupt our systems and operations, supply chain, and ability to produce and distribute our product candidates. We and the third parties with whom we work are subject to a variety of evolving threats, including but not limited to social-engineering attacks (including through deep fakes, which may be increasingly more difficult to identify as fake, and phishing attacks), malicious code (such as viruses and worms), malware (including as a result of advanced persistent threat intrusions), denial-of-service credential stuffing attacks, credential harvesting, adware, ransomware, supply chain attacks, personnel misconduct or error, attacks enhanced or facilitated by AI, and other similar threats. Our information technology systems and data, and those of the third parties with whom we work, may also be subject to failure or disruption from software bugs, server malfunction, software or hardware failures, loss of data or other information technology assets, telecommunications failures, natural disasters such as earthquakes, fires, and floods, and other similar issues.

In particular, severe ransomware attacks are becoming increasingly prevalent and severe and can lead to significant interruptions, delays, or outages in our operations, disruptions to our clinical trials, loss of data (including data related to clinical trials), significant expense to restore data or systems, reputational loss and the diversion of funds. Extortion payments may alleviate the negative impact of a ransomware attack, but we may be unwilling or unable to make such payments due to, for example, applicable laws or regulations prohibiting such payments. In addition, our reliance on third-party service providers could introduce new cybersecurity risks and vulnerabilities, including supply-chain attacks, and other threats to our business operations. Such supply chain attacks have increased in frequency and severity, and we cannot guarantee that third parties and infrastructure in our supply chain have not been compromised or that they do not contain exploitable defects or bugs that could result in a breach to our information technology systems or the third-party information technology systems that support us and our services. Additionally, future or past business transactions (such as acquisitions or integrations) could expose us to additional cybersecurity risks and vulnerabilities, as our systems could be negatively affected by vulnerabilities present in acquired or integrated entities' systems and technologies. Furthermore, we may discover security issues that were not found during due diligence of such acquired or integrated entities, and it may be difficult to integrate companies into our information technology environment and security program.

Any of the previously identified or similar threats could cause a security incident or other interruption. A security incident or other interruption could result in unauthorized, unlawful, or accidental acquisition, modification, destruction, loss, alteration, encryption, disclosure of, or access to our sensitive information. A security incident or other interruption could disrupt our ability (and that of third parties with whom we work) to manufacture or deliver our product candidates.

We may expend significant resources (including financial), or modify our business activities and operations, including our clinical trial activities, in an effort to protect against security incidents or to detect, investigate, mitigate, contain and remediate a security incident. Certain data privacy and security obligations may require us to implement and maintain specific security measures or use industry-standard or reasonable security measures to protect our information technology systems and sensitive information.

Although we have implemented security measures designed to protect against, mitigate, and remediate security incidents, there can be no assurance that these measures will be effective. We have experienced attempts to compromise our information technology systems or otherwise cause a security incident, but, to our knowledge, such attempts have been unsuccessful. In addition, from time to time, our vendors inform us of security incidents. To date, we have not determined that such incidents as reported to us were material. However, we may not have all information related to such incidents and future incidents could have an adverse impact on our business.

We take steps designed to detect, mitigate, and remediate vulnerabilities in our information systems (such as our hardware and/or software, including that of third parties with whom we work). We may, however, be unable to detect and remediate vulnerabilities in our information technology systems because such threats and techniques change frequently, are often sophisticated in nature, and may not be detected until after a security incident has occurred, meaning that such vulnerabilities could be exploited. Unremediated high risk or critical vulnerabilities pose material risks to our business that may be exploited and could result in a security incident. Further, we may experience delays in developing and deploying remedial measures designed to address any such identified vulnerabilities. We may also face heightened physical and information technology risks due to our sharing office space with other tenants at certain of our sites. Any failure to prevent or mitigate security incidents or improper access to, use of, or disclosure of our clinical data or patients' personal data could result in significant liability under state, federal, and international law and may cause a material adverse impact to our reputation, affect our ability to conduct our clinical trials and potentially disrupt our business. In addition, as many of our employees work from home at least part of the time and utilize network connections outside our premises, including while at home, or in transit, this poses increased risks to our information technology systems and data.

Applicable data protection laws, privacy policies, data protection obligations and public company disclosure obligations may require us, or we may choose, to notify relevant stakeholders, including affected individuals, regulators and investors, of certain security incidents, or to implement other requirements, such as providing credit monitoring. Such disclosures and compliance with such requirements are costly, and the disclosures or the failure to comply with such requirements could lead to adverse consequences. If we (or a third party with whom we work) experience a security incident or are perceived to have experienced a security incident, we may also experience adverse consequences. These consequences may include: government enforcement actions (for example, investigations, fines, penalties, audits, and inspections); additional reporting requirements and/or oversight; restrictions on processing sensitive information (including personal data); litigation (including class claims) and mass arbitration; indemnification obligations; negative publicity; reputational harm; monetary fund diversions; interruptions in our operations (including availability of data); financial loss; and other similar harms. Whether a cybersecurity incident is reportable to our investors may not be straightforward, may take considerable time to determine, and may be subject to change as the investigation of the incident progresses, including changes that may significantly alter any initial disclosure that we provide. Moreover, experiencing a material cybersecurity incident and any mandatory disclosures could lead to negative publicity, loss of investor or partner confidence in the effectiveness of our cybersecurity measures, diversion of management's attention, governmental investigations, lawsuits, and the expenditure of significant capital and other resources.

Our contracts may not contain limitations of liability, and even where they do, there can be no assurance that the limitations of liability in our contracts are sufficient to protect us from liabilities, damages, or claims related to our data privacy and security obligations.

We cannot be sure that our insurance coverage will be adequate or sufficient to protect us from or adequately mitigate liabilities arising out of our privacy and security practices, or that such coverage will continue to be available on commercially reasonable terms or at all, or that such coverage will pay future claims.

In addition to experiencing a security incident, third parties may gather, collect, or infer sensitive information about us from public sources, data brokers, or other means that reveals competitively sensitive details about our organization and could be used to undermine our competitive advantage or market position. Additionally, sensitive information could be leaked, disclosed, or revealed as a result of or in connection with the use of generative artificial intelligence technologies by our employees, personnel, or vendors.

Changes in funding for the FDA, the SEC and other government agencies including comparable foreign regulatory authorities could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal functions on which the operation of our business may rely, which could negatively impact our business.*

The ability of the FDA or other comparable foreign regulatory authorities to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept payment of user fees, statutory, regulatory and policy changes, and business disruptions, such as those caused by the COVID-19 pandemic. Average review times at the agency and comparable foreign regulatory authorities have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies or other comparable foreign regulatory authorities may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical FDA, SEC and other government employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Our relationships with customers, physicians, and third-party payors are subject, directly or indirectly, to federal, state, local and foreign healthcare fraud and abuse laws, false claims laws, health information privacy and security laws, and other healthcare laws and regulations. If we or our employees, independent contractors, consultants, commercial partners and vendors violate these laws, we could face substantial penalties.

These laws may impact, among other things, our clinical research program, as well as our proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare items and services is subject to extensive laws and regulations designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive and other business arrangements. We may also be subject to federal, state and foreign laws governing the privacy and security of identifiable patient information, price reporting, false claims and provider transparency. If our operations are found to be in violation of any of these laws that apply to us, we may be subject to significant civil, criminal and administrative penalties.

We and the third parties with whom we work are subject to stringent and evolving privacy laws, regulations and standards as well as policies, contracts and other obligations related to data privacy and security. Our (or the third parties with whom we work) actual or perceived failure to comply with such obligations could lead to enforcement or litigation (including class claims) and mass arbitration demands, fines or penalties, a disruption of clinical trials or commercialization of products, reputational harm, or other adverse business effects.*

In the ordinary course of business, we process sensitive information. Accordingly, we are, or may become, subject to numerous data privacy and security obligations, such as various federal, state, local and foreign data privacy and security laws, regulations, guidance, and industry standards as well as external and internal privacy and security policies, contracts and other obligations that apply to data privacy and security and our processing of personal data and the processing of personal data on our behalf.

In the United States, federal, state, and local governments have enacted numerous data privacy and security laws, including data breach notification laws, personal data privacy laws, consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act) and other similar laws (e.g., wiretapping laws). For example, the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended by the Health Information Technology for Economic and Clinical Health

Act (HITECH), and their respective implementing regulations, imposes requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH, through its implementing regulations, makes certain of HIPAA's privacy and security standards directly applicable to business associates, defined as a person or organization, other than a member of a covered entity's workforce, that creates, receives, maintains or transmits protected health information for or on behalf of a covered entity for a function or activity regulated by HIPAA as well as their covered subcontractors.

In the past few years, numerous U.S. states have enacted comprehensive privacy laws that impose certain obligations on covered businesses, including providing specific disclosures in privacy notices and affording residents with certain rights concerning their personal data. As applicable, such rights may include the right to access, correct, or delete certain personal data, and to opt-out of certain data processing activities, such as targeted advertising, profiling, and automated decision-making. The exercise of these rights may impact our business and ability to provide our products and services. Certain states also impose stricter requirements for processing certain personal data, including sensitive information, such as conducting data privacy impact assessments. These state laws allow for statutory fines for noncompliance. For example, the California Consumer Privacy Act of 2018 (CCPA), applies to personal data of consumers, business representatives, and employees who are California residents, and requires covered companies to provide specific disclosures in privacy notices and honor requests of such individuals to exercise certain privacy rights. The CCPA provides for fines of up to $7,500 per intentional violation and allows private litigants affected by certain data breaches to recover significant statutory damages. The CCPA and other comprehensive U.S. state privacy laws exempt some data processed in the context of clinical trials, but these developments may further complicate compliance efforts, and increase legal risk and compliance costs for us, the third parties with whom we work. Such laws may significantly impact our business activities, exemplifying the vulnerability of our business to evolving regulatory environment related to personal data and protected health information. Similar laws are being considered in other states, as well as at the federal and local levels, and we expect more states to pass similar laws in the future.

Outside the United States, there are an increasing number of laws, regulations and industry standards concerning governing privacy, data protection, information security and cross-border personal data transfers. For example, the European Union's General Data Protection Regulation (EU GDPR), the United Kingdom's GDPR (UK GDPR) (collectively, GDPR), and Australia's Privacy Act, China's Personal Information Protection Law (PIPL), and Canada's Personal Information Protection and Electronic Documents Act (PIPEDA) (and various related provincial laws) and Anti-Spam Legislation (CASL) may apply to our operations and impose strict requirements for processing personal data.

For example, under the GDPR, companies may face temporary or definitive bans on data processing and other corrective actions; fines of up to €20,000,000 under the EU GDPR / 17.5 million pounds sterling under the UK GDPR, or up to 4% annual total revenue, in each case, whichever is greater; or private litigation related to processing of personal data brought by classes of data subjects or consumer protection organizations authorized at law to represent their interests.

In the ordinary course of business, we may transfer personal data from Europe and other jurisdictions to the United States or other countries. Europe and other jurisdictions have enacted laws requiring data to be localized or limiting the transfer of personal data to other countries. In particular, the European Economic Area (EEA) and the United Kingdom (UK) have significantly restricted the transfer of personal data to the United States and other countries whose privacy laws it generally believes are inadequate. Other jurisdictions may adopt similarly stringent interpretations of their data localization and cross-border data transfer laws. Although there are currently various mechanisms that may be used to transfer personal data from the EEA and UK to the United States in compliance with law, such as the EEA and UK's standard contractual clauses, the UK's International Data Transfer Agreement / Addendum, and the EU-U.S. Data Privacy Framework and the UK extension thereto (which allows for transfers for relevant U.S.-based organizations who self-certify compliance and participate in the Framework), these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal data to the United States. If there is no lawful manner for us to transfer personal data from the EEA, UK, or other jurisdictions to the United States, or if the requirements for a legally-compliant transfer are too onerous, we may face significant adverse consequences, including the interruption or degradation of our operations (such as by limiting our ability to conduct clinical trial activities in Europe and elsewhere), the need to relocate part of or all of our business or data processing activities to other jurisdictions (such as Europe) at significant expense, the inability to transfer data and work with partners, vendors and other third parties, increased exposure to regulatory actions, substantial fines, and injunctions against processing personal data necessary to operate our business. Additionally, companies that transfer personal data out of the EEA and UK to other jurisdictions, particularly to the United States, are subject to increased scrutiny from regulators, individual litigants, and activist groups. Some European regulators have also ordered certain companies to suspend or permanently cease certain transfers out of Europe for allegedly violating the GDPR's cross-border data transfer limitations. The United States is also increasingly scrutinizing certain data transfers and may also impose certain data localization requirements, particularly if we transfer personal data to, or process personal data of residents of, high risk or sanctioned jurisdictions.

In addition, privacy advocates and industry groups have proposed, and may propose, standards with which we are legally or contractually bound to comply. We are also bound by contractual obligations related to data privacy and security, and our efforts to comply with such obligations may not be successful. We publish privacy notices and other statements regarding data privacy and security. If any of our privacy notices or related materials or statements are found to be deficient, lacking in transparency, deceptive, unfair, or misrepresentative of our practices, we may be subject to investigation, enforcement actions by regulators or other adverse consequences. Furthermore, our employees and personnel may use generative artificial intelligence technologies to perform their work, and the disclosure and use of personal data in such technologies is subject to various privacy laws and other privacy obligations.

Our obligations related to data privacy and security are quickly changing, becoming increasingly stringent fashion, and creating uncertainty. Additionally, these obligations may be subject to differing applications and interpretations, which may be inconsistent or conflict among jurisdictions. As a result, preparing for and complying with these obligations requires significant resources and may necessitate changes to our information technologies, systems and practices, as well as those of any third-party collaborators, service providers, contractors, consultants or other third parties that process personal data on our behalf.

Although we endeavor to comply with our applicable privacy and security obligations, we may at times fail (or be perceived to have failed) to do so. Moreover, despite our efforts, we may not be successful in achieving compliance if our employees, third-party collaborators, service providers, contractors or consultants fail to comply with such obligations, which could negatively impact our business operations and compliance posture. If we or the third parties with whom we work fail, or are perceived to have failed, to address or comply with obligations related to data privacy and security obligations, we could face significant consequences including, but not limited to, government enforcement actions (e.g., investigations, fines, penalties, audits and inspections, and similar); litigation (including class-related claims) and mass arbitration demands; additional reporting requirements and/or oversight; temporary or permanent bans or restrictions on all or some processing of personal data; orders to destroy or not use personal data; and imprisonment of company officials. In particular, plaintiffs have become increasingly more active in bringing privacy-related claims against companies, including class claims and mass arbitration demands. Some of these claims allow for the recovery of statutory damages on a per violation basis, and, if viable, carry the potential for monumental statutory damages, depending on the volume of data and the number of violations. Any of these events could have a material adverse effect on our reputation, business, or financial condition, including but not limited to: interruptions or stoppages in our business operations (including clinical trials); inability to process personal data or to operate in certain jurisdictions; limited ability to develop or commercialize our products; expenditure of time and resources to defend any claim or inquiry; adverse publicity; or substantial changes to our business model or operations.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our product candidates.

We face an inherent risk of product liability as a result of the clinical testing of our product candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if our product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our product candidates. Even successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our product candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;
- initiation of investigations by regulators;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue;
- exhaustion of any available insurance and our capital resources;
- the inability to commercialize any product candidate; and

- a decline in our share price.

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop, alone or with corporate collaborators. Our insurance policies may also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. While we have obtained and expect to obtain clinical trial insurance for our clinical trials, we may have to pay amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with any future corporate collaborators entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

Risks Related to the Development of Our Product Candidates

Our engineered allogeneic T cell product candidates represent a novel approach to cancer treatment that creates significant challenges for us.*

We are developing a pipeline of allogeneic T cell product candidates that are engineered from healthy donor T cells to express CARs and are intended for use in any eligible patient with certain cancers. Advancing these novel product candidates creates significant challenges for us, including:

- manufacturing our product candidates to our or regulatory specifications and in a timely manner to support our clinical trials, and, if approved, commercialization;
- sourcing clinical and, if approved, commercial supplies for the raw materials used to manufacture our product candidates;
- understanding and addressing variability in the quality of a donor's T cells, which could ultimately affect our ability to produce product in a reliable and consistent manner and treat certain patients;
- educating medical personnel regarding the potential side effect profile of our product candidates, if approved, such as the potential adverse side effects related to CRS, neurotoxicity, GvHD, prolonged cytopenia, aplastic anemia and neutropenic sepsis;
- using medicines to preempt or manage adverse side effects of our product candidates and such medicines may be difficult to source or costly or may not adequately control the side effects and/or may have other safety risks or a detrimental impact on the efficacy of the treatment;
- conditioning patients with chemotherapy and ALLO-647 or other lymphodepletion agents in advance of administering our product candidates, which may be difficult to source, costly or increase the risk of infections and other adverse side effects;
- obtaining regulatory approval, as the FDA and other comparable foreign regulatory authorities have limited experience with development of allogeneic T cell therapies for cancer; and
- establishing sales and marketing capabilities upon obtaining any regulatory approval to gain market acceptance of a novel therapy.

Gene-editing is a relatively new technology, and if we are unable to use this technology in our intended product candidates, our revenue opportunities will be materially limited.

Cellectis' TALEN technology, which we use in our oncology programs, and Arbor's CRISPR technology, which we use in our AID program, both involve relatively new approaches to gene editing, using sequence-specific DNA-cutting enzymes, or nucleases, to perform precise and stable modifications in the DNA of living-cells and organisms, and we have very little experience with Arbor's CRISPR technology. Cellectis and Arbor have not created nucleases for all gene sequences that we may seek to target, and they may not agree to or have difficulty creating nucleases for other gene sequences that we may seek to target, which could limit the usefulness of this technology. This technology may also not be shown to be effective in clinical studies that Cellectis, we or other licensees of Cellectis technology or Arbor's CRISPR technology may conduct, or may be associated with safety issues that may negatively affect our development programs. For instance, gene-editing may create unintended changes to the DNA such as a non-target site gene-editing, a large deletion, or a DNA translocation, any of which could lead to oncogenesis. In our ALPHA2 trial, we observed a chromosomal abnormality, and the FDA placed our clinical trials on hold following this observation. While our investigation concluded that gene editing was not responsible for the chromosomal abnormality and the hold was resolved, we may discover future abnormalities caused by gene editing or other

factors that would impact our development plans. The gene editing of our product candidates may also not be successful in limiting the risk of GvHD or premature rejection by the patient.

In addition, the gene-editing industry is rapidly developing, and our competitors may introduce new technologies that render our technology obsolete or less attractive. New technology could emerge at any point in the development cycle of our product candidates. As competitors use or develop new technologies, any failures of such technology could adversely impact our program. We also may be placed at a competitive disadvantage, and competitive pressures may force us to implement new technologies at a substantial cost, and which would delay our development programs. In addition, our competitors may have greater financial, technical and personnel resources that allow them to enjoy technological advantages and may in the future allow them to implement new technologies before we can. We cannot be certain that we will be able to implement technologies on a timely basis or at a cost that is acceptable to us. If we are unable to maintain technological advancements consistent with industry standards, our operations and financial condition may be adversely affected.

We are heavily reliant on our partners, Cellectis and Servier, for access to TALEN gene editing technology for the manufacturing and development of our oncology product candidates.

A critical aspect to manufacturing allogeneic T cell product candidates involves gene editing the healthy donor T cells in an effort to avoid GvHD and to limit the patient's immune system from attacking the allogeneic T cells. GvHD results when allogeneic T cells start recognizing the patient's normal tissue as foreign. For our oncology product candidates, we use Cellectis' TALEN gene-editing technology to inactivate a gene coding for TCRα, a key component of the natural antigen receptor of T cells, to cause the engineered T cells to be incapable of recognizing foreign antigens. Accordingly, when injected into a patient, the intent is for the engineered T cell not to recognize the tissue of the patient as foreign and thus avoid attacking the patient's tissue. In addition, we use TALEN gene editing in our oncology product candidates to inactivate the CD52 gene in donor T cells, which codes for the target of an anti-CD52 monoclonal antibody. Anti-CD52 monoclonal antibodies deplete CD52 expressing T cells in patients while sparing therapeutic allogeneic T cells lacking CD52. By administering an anti-CD52 antibody prior to infusing our oncology product candidates, we believe we have the potential to reduce the likelihood of a patient's immune system from rejecting the engineered allogeneic T cells for a sufficient period of time to enable a window of persistence during which the engineered allogeneic T cells can actively target and destroy the cancer cells. However, the antibody may not have the benefits that we anticipate and could have adverse effects.

We rely on an agreement with Cellectis for exclusive rights to use TALEN technology for 15 select cancer targets, including BCMA, FLT3, CD70, DLL3, Claudin 18.2 and other targets included in our pipeline. We also rely on Cellectis, through our agreement with Servier, for exclusive rights to UCART19, ALLO-501 and cema-cel. Any other gene-editing technology used to research and develop product candidates directed at targets not covered by our existing agreements with Cellectis and Servier will require significant investment and time for advancement. In addition, the Cellectis gene-editing technology may fail to produce viable product candidates. Moreover, both Servier and Cellectis may terminate our respective agreements in the event of a material breach of the agreements, or upon certain insolvency events. Cellectis has challenged and may in the future challenge certain performance by Servier, such as its development of products licensed under the Cellectis-Servier Agreement in ALL, and any failure by those parties to resolve such matters may have an adverse impact on us. If our agreements were terminated or we required other gene editing technology, such a license or technology may not be available to us on reasonable terms, or at all, and advancing other gene editing technology would require significant resources.

Servier's discontinuation of its involvement in the development of CD19 Products and Servier's disputes with Cellectis, or future disputes with us, may have adverse consequences.*

On September 15, 2022, Servier sent a notice of discontinuation (Discontinuation) of its involvement in the development of CD19, including the CD19 Products pursuant to the Original Servier Agreement. Under the Servier Agreement, Servier sublicenses to us certain rights it has licensed from Cellectis relating to Cellectis' TALEN gene editing technology pursuant to the Servier-Cellectis Agreement.

In May 2024 we entered into the Servier Amendment which made various amendments to the Original Servier Agreement, and expanded our licensed territory thereunder to include the European Union and the United Kingdom, and also granted us an option, under certain circumstances, to expand the territory further to include China (including Hong Kong) and Japan. Although we believe that we and Servier are both in full compliance of our respective obligations under the Servier Agreement, there can be no assurance that we will not have future disputes with Servier regarding our respective rights and obligations under our agreements and any future dispute could jeopardize our CD19 Products license, the loss of which would have a significant adverse impact on our business, financial condition, and prospects.

In April 2024 Cellectis filed a Form 20-F with the SEC, stating that Cellectis does not believe that: (1) the Servier-Cellectis Agreement permits Servier to grant a world-wide sub-license to us; and (2) Servier has not complied with its performance obligations under the Servier-Cellectis Agreement, which Cellectis believes may involve material breaches thereof. Cellectis has initiated an arbitration proceeding against Servier through the *Centre de Médiation et d'Arbitrage de Paris*, wherein Cellectis is seeking a decision terminating the Servier-Cellectis Agreement, and seeking certain compensation. Cellectis has asserted that a favorable determination by the arbitral tribunal, if achieved, would return development and commercialization rights for the licensed products back to Cellectis. Although Servier has advised us that they believe Cellectis' claims are without merit, there is a risk that Cellectis may prevail in the arbitration and terminate the Servier-Cellectis Agreement. Additionally, although we believe the Servier-Cellectis Agreement grants Servier the right to grant sublicenses without further consent from Cellectis, there is a risk that Cellectis may challenge the expansion of our territory under the Servier Agreement to regions outside the US. The Servier Agreement provides us with certain rights to obtain a direct license with Cellectis in the event the Servier-Cellectis Agreement is terminated, however, there can be no assurance that we will be able to obtain such a direct license. Additionally, although the Servier-Cellectis Agreement grants Servier the right to grant sublicenses without further consent from Cellectis, there is a risk that Cellectis could seek to challenge the expansion of our rights under the Servier Agreement to include the European Union and the United Kingdom. The termination of the Servier-Cellectis Agreement, our failure to obtain a direct license with Cellectis after such termination, or a successful challenge to the territorial expansion of our rights under the Servier Agreement would have a significant adverse impact on our business, financial condition, and prospects.

Our oncology development strategy relies on incorporating an anti-CD52 monoclonal antibody as part of the lymphodepletion preconditioning regimen prior to infusing allogeneic CAR T cell product candidates.*

Our oncology product candidates utilize an anti-CD52 monoclonal antibody as part of a lymphodepletion regimen to be infused prior to infusing our product candidates. The anti-CD52 antibody may reduce the likelihood of a patient's immune system rejecting the engineered allogeneic T cells for a sufficient period of time to enable a window of persistence during which such engineered allogeneic T cells can actively target and destroy cancer cells. However, the antibody may not have the benefits that we anticipate and could have adverse effects. For instance, our lymphodepletion regimen, including using an anti-CD52 antibody, will cause immune suppression that can be of unpredictable depth and duration and that may be associated with an increased risk of infection, such as to common viral or bacterial or opportunistic pathogens, that may be unable to be cleared and ultimately lead to other serious adverse events or death.

In the prior CALM and PALL trials, a commercially available monoclonal antibody, alemtuzumab, that binds CD52 was used. Alemtuzumab is known to have risk of causing certain adverse events. In 2020, within the context of a procedure based on Article 20 of Regulation 726/2204 (EMA Regulation), the EMA completed a pharmacovigilance review of alemtuzumab in the context of the treatment of multiple sclerosis following reports of immune-mediated conditions and problems affecting the heart and blood vessels, including fatal cases. The EMA recommended that alemtuzumab should not be used in patients with certain heart, circulation or bleeding disorders or in patients who have autoimmune disorders other than multiple sclerosis. The EMA also recommended that alemtuzumab only be given in a hospital with ready access to intensive care facilities and specialists who can manage serious adverse reactions. The use of our anti-CD52 antibody may result in the same or similar adverse events as alemtuzumab, and we have chosen to administer our product candidates at trial centers experienced at managing patients with advanced malignancies as well as toxicities associated with immunomodulatory therapies, which significantly limits the sites that are eligible to participate in our clinical trials. If the EMA or other regulatory agencies further limit the use of alemtuzumab or anti-CD52 antibodies, our clinical program would be adversely affected.

To secure our own readily available source of anti-CD52 antibody, we are developing our own monoclonal anti-CD52 antibody, ALLO-647, which we use in our clinical trials. ALLO-647 may cause serious adverse events that alemtuzumab may cause, including fatal adverse events, infusion related reactions, immune thrombocytopenia, glomerular nephropathies, thyroid disorders, autoimmune cytopenias, autoimmune hepatitis, hemophagocytic lymphohistiocytosis, acquired hemophilia, infections, stroke, and progressive multifocal leukoencephalopathy. In addition, we are exploring various dosing strategies for lymphodepletion in our clinical trials, such as including varying doses of the chemotherapy agents and/or ALLO-647 or eliminating one or more of the agents, which may alter the risk of serious adverse events or have other undesirable outcomes such as a reduction of the efficacy of treatment. Additionally, our experimental lymphodepletion regimens may show different safety profiles when paired with different allogeneic CAR T product candidates such that regimens deemed safe with one CAR T product candidate may be determined to be associated with unacceptable toxicity when combined with another CAR T candidate or with the same candidate in a different patient population. If observed, these differences may require additional clinical exploration and may cause delays in the execution or termination of development campaigns. See the section entitled "Business—Product Pipeline and Development Strategy" included in our Annual Report for information on safety events.

If we are unable to successfully develop and manufacture ALLO-647 in the timeframe we anticipate, or at all, such as if regulatory authorities do not agree with our selected dose or approve of the use of ALLO-647 in combination with our allogeneic T cell product candidates, our clinical trial timelines and ability to commercialize any of our oncology product candidates would be significantly delayed.

Risks Related to Our Reliance on Third Parties

We rely and will continue to rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval of or commercialize our product candidates.*

We depend and will continue to depend upon independent investigators and collaborators, such as universities, medical institutions, CROs and strategic partners to conduct our preclinical and clinical trials under agreements with us.

We negotiate budgets and contracts with CROs and study sites, which may result in delays to our development timelines and increased costs. We will rely heavily on these third parties over the course of our clinical trials, and we control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with applicable protocol, legal, regulatory and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. We and these third parties are required to comply with GCPs, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties fail to comply with applicable GCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, such regulatory authorities will determine that any of our clinical trials comply with the GCP regulations. In addition, our clinical trials must be conducted with biologic product produced under cGMPs and will require a large number of test patients. Our failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

Any third parties conducting our clinical trials are not and will not be our employees and, except for remedies available to us under our agreements with such third parties, we cannot control whether or not they devote sufficient time and resources to our ongoing preclinical, clinical and nonclinical programs. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical studies or other drug development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to complete development of, obtain regulatory approval of or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenue could be delayed.

If any of our relationships with trial sites, or any CRO that we may use in the future, terminates, we may not be able to enter into arrangements with alternative trial sites or CROs or do so on commercially reasonable terms. Switching or adding third parties to conduct our clinical trials involves substantial cost and requires extensive management time and focus. In addition, there is a natural transition period when a new third party commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines.

We rely on third parties to manufacture and store our clinical product supplies, and we may have to rely on third parties to produce and process our product candidates, if approved.*

While we utilize CF1 for clinical manufacturing of our product candidates, we may continue to use CDMOs from time to time to manufacture product candidates in the United States while we manage all other aspects of the supply, including planning, CDMO oversight, disposition and distribution logistics. For example, in the past, Servier was responsible for UCART19 manufacturing, and experienced UCART19 supply issues that limited its ability to recruit new patients. There can be no assurance that we will not experience supply or manufacturing issues in the future.

We do not have long-term agreements in place with CDMOs for the manufacture of our cell therapies or of ALLO-647. If we are unable to contract with CDMOs on acceptable terms or at all, our clinical development program would be delayed and our business would be significantly harmed. For example, in February 2024 Catalent, Inc. and Novo Holdings announced that they have entered into a merger agreement under which Novo Holdings will acquire Catalent. The merger is expected to close towards the end of 2024, and shortly thereafter Novo Holdings intends to sell three Catalent fill-finish sites and related assets acquired in the merger to Novo Nordisk. ALLO-647 is manufactured at one of these sites, and there is a risk that the pendency of the merger and/or the merger itself could impact our ability to utilize the Catalent site for manufacturing ALLO-647. If we are unable to manufacture ALLO-647 at Catalent, we would be required to identify, qualify and establish an alternative manufacturing site and we may be unable to do so in a timely manner, if at all, which could significantly delay our clinical development timelines.

We have built CF1 and are in the process of transitioning the manufacturing of certain product candidates to our manufacturing facility. Manufacturing product candidates in our own facility requires that we meet certain regulatory conditions, which may delay or extend our clinical trial timelines. As we transition more manufacturing to CF1, there is a risk that we may need to re-engage our CDMO to manufacture material, which would be costly and there is a risk that the CDMO may be unavailable or may fail in manufacturing, such as due to the CDMO having to retrain its personnel, or train new personnel, to manufacture our material.

We have not yet caused our product candidates to be manufactured or processed on a commercial scale and may not be able to achieve manufacturing and processing and may be unable to create an inventory of mass-produced, off-the-shelf product to satisfy demands for any of our product candidates. Our clinical supply is also limited to small quantities and any latent defects discovered in our supply could significantly delay our development timelines.

In addition, our actual and potential future reliance on a limited number of third-party manufacturers exposes us to the following risks:

- We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA or other comparable foreign regulatory authorities may have questions regarding any replacement contractor. This may require new testing and regulatory interactions. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products after receipt of FDA or other comparable foreign regulatory authorities questions, if any.
- Our third-party manufacturers might be unable to timely formulate and manufacture our product or produce the quantity and quality required to meet our clinical and commercial needs, if any.
- Contract manufacturers may not be able to execute our manufacturing procedures appropriately.
- Contract manufacturers may be subject to adverse legislative actions.
- Manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration and corresponding state agencies or other comparable foreign regulatory authorities to ensure strict compliance with cGMP and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards.
- We may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our products.
- Our future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.
- Our third-party manufacturers could breach or terminate their agreement with us.

Our contract manufacturers would also be subject to the same risks we face in developing our own manufacturing capabilities, as described above. Our current and potential future CDMOs may also be required to shut down in response to health epidemics or pandemics, or they may prioritize manufacturing for therapies or vaccines for other diseases. In addition, our CDMOs have certain responsibilities for storage of raw materials and in the past have lost or failed to adequately store our raw materials. We also rely on third parties to store our released product candidates, and any failure to adequately store our product candidates could result in significant delay to our development timelines. Any additional or future damage or loss of raw materials or product candidates could materially impact our ability to manufacture and supply our product candidates. Each of these risks could delay our clinical trials, the approval, if any, of our product candidates by the FDA or other comparable foreign regulatory authorities or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenue.

In addition, we rely on third parties to perform release tests on our product candidates prior to delivery to patients. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm.

We rely on T cells from healthy donors to manufacture our product candidates, and if we do not obtain an adequate supply of T cells from qualified donors, development of those product candidates, or commercialization, if approved, may be adversely impacted.*

Unlike autologous CAR T companies, we are reliant on receiving healthy donor material to manufacture our product candidates. Healthy donor T cells vary in type and quality, and this variation makes producing standardized product candidates more difficult and makes the development and commercialization pathway of those product candidates more uncertain. We have developed a screening process designed to enhance the quality and consistency of T cells used in the manufacture of our CAR T cell product candidates, but the manufacturing runs we have completed and tested in the clinic are limited across our product candidates. As we gain experience, we may find that our screening process fails to identify suitable donor material and we may discover unacceptable variability with the material after production. We may also have to update our specifications for new risks that may emerge, such as to screen for new viruses or chromosomal abnormalities.

We have strict specifications for donor material, which include specifications required by regulatory authorities. If we are unable to identify and obtain donor material that satisfy specifications, agree with regulatory authorities on appropriate specifications, or address variability in donor T cells, there may be inconsistencies in the product candidates we produce or we may be unable to initiate or continue clinical trials on the timelines we expect, which could harm our reputation and adversely impact our business and prospects.

In addition, vendors face challenges in obtaining donor material. While we have donor material on hand, if our vendors are unable to secure donor material, we may no longer have sufficient donor material to manufacture our product candidates.

Cell-based therapies rely on the availability of specialty raw materials, which may not be available to us on acceptable terms or at all.*

Our product candidates require many specialty raw materials, including viral vectors that deliver the CAR sequence and electroporation technology, some of which are manufactured by small companies with limited resources and experience to support a commercial product, and the suppliers may not be able to deliver raw materials to our specifications. We do not have contracts with many of the suppliers, and we may not be able to contract with them on acceptable terms, or at all. As a result of logistical challenges and recent inflation, we may experience higher costs or delays in receiving, or fail to secure entirely, key raw materials to support clinical or commercial manufacturing. Certain raw materials also require third-party testing, and some of the testing service companies may not have capacity or be able to conduct the testing that we request.

In addition, many of our suppliers normally support blood-based hospital businesses and generally do not have the capacity to support commercial products manufactured under cGMP by biopharmaceutical firms. The suppliers may be ill-equipped to support our needs, including generating data required for a BLA and in non-routine circumstances like an FDA or other comparable foreign regulatory authorities inspection or medical crisis, such as widespread contamination.

We also face competition for supplies from other cell therapy companies. Such competition may make it difficult for us to secure raw materials or the testing of such materials on commercially reasonable terms or in a timely manner.

Some raw materials are currently available from a single supplier, or a small number of suppliers. We cannot be sure that these suppliers will remain in business or that they will not be purchased by one of our competitors or another company that is not interested in continuing to produce these materials for our intended purpose. In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand in the event we must switch to a new supplier. For example, for certain raw materials we previously had to find an alternative supplier, which required qualifying the new supplier, which required meeting regulatory requirements for such qualification. If we need to transition to an alternative supplier in the future, it could result in additional costs, delays, diversion of resources or reduced manufacturing yields, any of which would negatively impact our operating results. Further, we may be unable to enter into agreements with a new supplier on commercially reasonable terms, which could have a material adverse impact on our business.

If we or our third-party suppliers use hazardous, non-hazardous, biological or other materials in a manner that causes injury or violates applicable law, we may be liable for damages.*

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical and biological materials. We and our suppliers are subject to federal, state and local laws and regulations in the United

States governing the use, manufacture, storage, handling and disposal of medical and hazardous materials, and there is a risk of contamination or injury resulting from medical or hazardous materials. For instance, we have had and may continue to have environmental notice of violations at our manufacturing facility. As a result of any such contamination or injury, we may incur liability or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical or hazardous materials. In addition, we have previously shipped certain materials to Allogene Overland PRC in China and may do so in the future to its successor entity. Any violation by our joint venture in the use, manufacture, storage, handling and disposal under foreign law may subject us to additional liability.

Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations.

Risks Related to Government Regulation

The FDA and other comparable foreign regulatory approval processes are lengthy and time-consuming, and we may experience significant delays in the clinical development and regulatory approval of our product candidates.*

The research, testing, manufacturing, labeling, approval, selling, import, export, marketing, and distribution of drug products, including biologics, are subject to extensive regulation by the FDA and other regulatory authorities in the United States and comparable foreign regulatory authorities. We are not permitted to market any biological drug product in the United States or elsewhere until we receive approval of a BLA from the FDA or equivalent approvals from other comparable foreign regulatory authorities. We have not previously submitted a BLA to the FDA, or similar approval filings to comparable foreign regulatory authorities. A BLA or equivalent foreign application must include extensive preclinical and clinical data and supporting information to establish the product candidate's safety and effectiveness for each desired indication. The BLA or equivalent foreign application must also include significant information regarding CMC matters for the product, and any delay or failure in generating such data to meet the evolving CMC regulatory requirements would delay any BLA filing or equivalent foreign application.

We expect the novel nature of our product candidates to create further challenges in obtaining regulatory approval. For example, the FDA or other comparable foreign regulatory authorities have limited experience with commercial development of allogeneic T cell therapies for cancer. We may also request clinical trial initiation or regulatory approval of future CAR-based product candidates by target, regardless of cancer type or origin, which the FDA or other comparable foreign regulatory authorities may have difficulty accepting. The FDA or other comparable foreign regulatory authorities may also require a panel of experts, referred to as an Advisory Committee, to deliberate on the adequacy of the safety and efficacy data to support licensure. The opinion of the Advisory Committee, although not binding, may have a significant impact on our ability to obtain licensure of the product candidates based on the completed clinical trials, as the FDA or comparable foreign regulatory authorities often adheres to the Advisory Committee's recommendations. Accordingly, the regulatory approval pathway for our product candidates may be uncertain, complex, expensive and lengthy, and approval may not be obtained.

We have previously experienced a delay in our clinical trials due to a clinical hold, and may experience future delays in completing planned clinical trials for a variety of reasons, including delays related to:

- obtaining regulatory authorization to begin a trial, if applicable, including regulatory approval of any companion diagnostic, if applicable;
- the availability of financial resources to commence and complete the planned trials;
- reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- developing and implementing processes and procedures with collaborators relating to the collection and transfer of patient samples and the timely performance of a companion diagnostic on such samples;
- obtaining approval at each clinical trial site by an independent IRB or a positive opinion from an Ethics Committee;
- obtaining regulatory and other approvals to modify the conduct of a clinical trial;
- recruiting suitable patients to participate in a trial;
- delays by a collaboration partner in running a companion diagnostic on patient samples;
- having patients complete a trial, including having patients enrolled in clinical trials dropping out of the trial prior to treatment, or return for post-treatment follow-up;

- clinical trial sites deviating from trial protocol or dropping out of a trial;
- addressing any patient safety concerns that arise during the course of a trial;
- adding new clinical trial sites; or
- manufacturing sufficient quantities of qualified materials under cGMPs, releasing product in accordance with specifications, and delivering product candidates for use in clinical trials.

We could also encounter future delays if physicians encounter unresolved ethical issues associated with enrolling patients in clinical trials of our product candidates in lieu of prescribing existing treatments that have established safety and efficacy profiles, or with respect to the ALPHA3 trial, in lieu of observation alone. Further, a clinical trial may be suspended or terminated by us, the Institutional Review Boards (IRBs) or Ethics Committees for the institutions in which such trials are being conducted or by the FDA or other comparable foreign regulatory authorities due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other comparable foreign regulatory authorities resulting in the imposition of a clinical hold, safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions, lack of adequate funding to continue the clinical trial, or based on a recommendation by any Data Safety Monitoring Committee. The FDA or other comparable foreign regulatory authorities' review of our data of our clinical trials may, depending on the data, also result in the delay, suspension or termination of one or more of our clinical trials, which would also delay or prevent the initiation of our other planned clinical trials. If we experience termination of, or delays in the completion of, any clinical trial of our product candidates, the commercial prospects for our product candidates will be harmed, and our ability to generate product revenue will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product development and approval process and jeopardize our ability to commence product sales and generate revenue.

Many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may ultimately lead to the denial of regulatory approval of our product candidates.

The regulatory landscape that will govern our product candidates is uncertain; regulations relating to more established gene therapy and cell therapy products are still developing, and changes in regulatory requirements could result in delays or discontinuation of development of our product candidates or unexpected costs in obtaining or maintaining any regulatory approval.*

Because we are developing novel CAR T cell immunotherapy product candidates that are unique biological entities, the regulatory requirements that we will be subject to are not entirely clear. Even with respect to more established products that fit into the categories of gene therapies or cell therapies, the regulatory landscape is still developing and guidance from regulatory authorities may continue to change in the future.

Moreover, there is substantial, and sometimes uncoordinated, overlap in those responsible for regulation of existing gene therapy products and cell therapy products. For example, in the United States, the FDA has established the Office of Tissues and Advanced Therapies (OTAT), formerly known as the Office of Cellular, Tissue and Gene Therapies (OCTGT), within its Center for Biologics Evaluation and Research (CBER) to consolidate the review of gene therapy and related products, and the Cellular, Tissue and Gene Therapies Advisory Committee to advise CBER on its review. Gene therapy clinical trials are also subject to review and oversight by an institutional biosafety committee (IBC), a local institutional committee that reviews and oversees basic and clinical research conducted at the institution participating in the clinical trial. Although the FDA decides whether individual gene therapy protocols may proceed, review process and determinations of other reviewing bodies can impede or delay the initiation of a clinical study, even if the FDA has reviewed the study and approved its initiation. Conversely, the FDA can place an IND application on clinical hold even if such other entities have provided a favorable review. Furthermore, each clinical trial must be reviewed and approved by an independent IRB at or servicing each institution at which a clinical trial will be conducted. In addition, adverse developments in clinical trials of gene therapy products conducted by others may cause the FDA or other regulatory bodies to change the requirements for approval of any of our product candidates.

Complex regulatory environments exist in other jurisdictions in which we might consider seeking regulatory approvals for our product candidates, further complicating the regulatory landscape. For example, in the European Union a special committee called the Committee for Advanced Therapies (CAT) was established within the EMA in accordance with Regulation (EC) No 1394/2007 on advanced-therapy medicinal products (ATMPs) to assess the quality, safety and efficacy of ATMPs, and to follow scientific developments in the field. ATMPs include gene therapy products as well as somatic cell therapy products and tissue engineered products. In this regard, on May 28, 2014, the EMA issued a recommendation that

UCART19 be considered a gene therapy product under Regulation (EC) No 1394/2007 on ATMPs. We cannot conclude that our product candidates will receive a similar recommendation.

These various regulatory review committees and advisory groups and new or revised guidelines that they promulgate from time to time may lengthen the regulatory review process, require us to perform additional studies, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. Because the regulatory landscape for our CAR T cell immunotherapy product candidates is new, we may face even more cumbersome and complex regulations than those emerging for gene therapy products and cell therapy products. Furthermore, even if our product candidates obtain required regulatory approvals, such approvals may later be withdrawn as a result of changes in regulations or the interpretation of regulations by applicable regulatory agencies.

Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product to market could decrease our ability to generate sufficient product revenue to maintain our business.

The FDA or comparable foreign regulatory authorities may disagree with our regulatory plan and we may fail to obtain regulatory approval of our CAR T cell product candidates.*

The general approach for FDA or comparable foreign regulatory authorities approval of a new biologic or drug is for the sponsor to provide dispositive data from two well-controlled, Phase 3 clinical studies of the relevant biologic or drug in the relevant patient population. Phase 3 clinical studies typically involve hundreds of patients, have significant costs and take years to complete. We expect ongoing FDA, EMA, or comparable foreign regulatory authorities feedback on our trials, some of which may lead to changes in the trials, which could cause future delays to our trials. In addition, even if we believe the results are sufficiently compelling, such as for the ALPHA2 (CLL) and ALPHA3 trials, the FDA, EMA, or comparable foreign regulatory authorities could ultimately require longer-term follow-up results, additional data from our clinical trials or additional trials that could delay or prevent our first BLA submission. The FDA, EMA, or comparable foreign regulatory authorities may require that we conduct a comparative trial against an approved therapy including potentially an approved autologous T cell therapy, which would significantly delay our development timelines and require substantially more resources. In addition, the FDA, EMA, or comparable foreign regulatory authorities may only allow us to evaluate patients that have failed or who are ineligible for autologous therapy, which are extremely difficult patients to treat and patients with advanced and aggressive cancer, and our product candidates may fail to improve outcomes for such patients.

If the FDA or European Commission grant accelerated approval for our product candidates, as a condition for accelerated approval, the FDA or the European Commission may require us to perform post-marketing studies to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoint, and the drug or biologic may be subject to withdrawal procedures by the FDA that are more accelerated than those available for regular approvals. The FDA or European Commission may ultimately refuse to grant accelerated approval for our product candidates and require a Phase 3 clinical trial prior to approval, particularly since our product candidates represent a novel treatment. In addition, the standard of care may change with the approval of new products in the same indications that we are studying. This may result in the FDA, the European Commission, or other regulatory agencies requesting additional studies to show that our product candidate is superior to the new products.

Our clinical trial results may also not support approval. In addition, our product candidates could be delayed in receiving approval or fail to receive regulatory approval for many reasons, including the following:

- the inability to resolve any future clinical hold;
- the FDA, EMA, or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA, EMA, or comparable foreign regulatory authorities that our product candidates are safe and effective for any of their proposed indications;
- the results of clinical trials may not meet the level of statistical significance required by the FDA, EMA, or comparable foreign regulatory authorities for approval, including due to the heterogeneity of patient populations;
- we may be unable to demonstrate that our product candidates' clinical and other benefits outweigh their safety risks;
- the FDA, EMA, or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;

- the data collected from clinical trials of our product candidates may not be sufficient to the satisfaction of the FDA, EMA, or comparable foreign regulatory authorities to support the submission of a BLA or other comparable submission in foreign jurisdictions or to obtain regulatory approval in the United States or elsewhere;
- the FDA, EMA, or comparable foreign regulatory authorities will review extensive CMC data, our manufacturing process and inspect the relevant commercial manufacturing facility and may not approve our manufacturing process or facility;
- the approval policies or regulations of the FDA, EU, or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval; and
- we may be unable to agree on any required pediatric investigation plan with regulatory authorities prior to any BLA filing.

We may be unable to obtain regulatory approval for ALLO-647 in a timely manner or at all, which could delay any approval or commercialization of our allogeneic T cell product candidates.*

As we are concurrently developing ALLO-647 to be used as part of the lymphodepletion regimen for our allogeneic CAR T cell product candidates, mapping a co-development path for dual approval of ALLO-647 and any of our CAR T cell product candidates and coordinating concurrent review with different divisions of competent regulatory authorities. As an example, the divisions of the FDA create additional regulatory uncertainty for us and may delay the development of our product candidates. We expect the Center for Drug Evaluation and Research division of the FDA to exercise authority over the regulatory approval of ALLO-647 while the CBER division will oversee the regulatory approval of our allogeneic CAR T cell product candidates.

In addition, the FDA is requiring us to demonstrate the overall contribution of ALLO-647 to the benefit to risk ratio of the lymphodepletion regimen for cema-cel. We plan to assess ALLO-647 through part one of the ALPHA3 trial. Some clinical trial sites may elect not to participate, and we cannot be certain when or whether we will be able to successfully enroll the ALPHA3 trial in a timely manner or that the outcome of this study will support FDA approval of both cema-cel and ALLO-647. Any delays to ALLO-647 approval could delay any approval or commercialization of our allogeneic CAR T cell product candidates. We anticipate that the EMA, or comparable foreign regulatory authorities will impose equivalent obligations as part of the marketing authorization process in their territory.

If we, or our collaborators, are required by the FDA, or comparable foreign regulatory authorities, to obtain approval (or clearance, or certification) of a companion diagnostic device in connection with approval of one of our product candidates, and we, or our collaborators, do not obtain, or face delays in obtaining, approval (or clearance, or certification) of a companion diagnostic device, we will not be able to commercialize the product candidate, and our ability to generate revenue will be materially impaired.*

According to FDA guidance, if the FDA determines that a companion diagnostic device is essential to the safe and effective use of a novel therapeutic product or indication, the FDA generally will not approve the therapeutic product or new therapeutic product indication if the companion diagnostic is not also approved or cleared for that indication. If a satisfactory companion diagnostic is not commercially available, we may be required to create or obtain one that would be subject to regulatory approval requirements. For example, we are collaborating with Foresight Diagnostics as part of our clinical trial enrollment process for ALPHA3 to identify patients with MRD that we believe may be most likely to benefit from treatment with cema-cel. The process of validating such diagnostic can be time consuming and costly.

Companion diagnostics are developed in conjunction with clinical programs for the associated product and are subject to regulation as medical devices by the FDA and comparable foreign regulatory authorities, and, to date, the FDA has generally required premarket approval of companion diagnostics for cancer therapies. Generally, when a companion diagnostic is essential to the safe and effective use of a therapeutic product, the FDA requires that the companion diagnostic be approved concurrent with approval of the therapeutic product and before a product can be commercialized. In the EEA, companion diagnostics are deemed to be in vitro diagnostic medical devices (IVDs) and are governed by Regulation 2017/746 (IVDR). IVDs, including companion diagnostics, must conform with the general safety and performance requirements (GSPR) of the IVDR by December 2028.

If the FDA, or a comparable foreign regulatory authority, requires approval (or certification or clearance) of a companion diagnostic for any of our product candidates, whether before or after the product candidate obtains marketing approval, we and/or third-party collaborators may encounter difficulties in developing and obtaining approval (or clearance, or certification) for these companion diagnostics. Any delay or failure by us or third-party collaborators to develop or obtain

regulatory approval (or clearance, or certification) of a companion diagnostic could delay or prevent approval or continued marketing of our related product candidates. We, or our collaborators, may also experience delays in developing a sustainable, reproducible, and scalable manufacturing process for the companion diagnostic or in transferring that process to commercial partners or negotiating insurance reimbursement plans, all of which may prevent us from completing our clinical trials or commercializing our product candidates, if approved, on a timely or profitable basis, if at all.

Our ALPHA3 trial design requires the use of Foresight Diagnostics' PhasED-Seq ™ Circulating Tumor DNA Platform as a companion diagnostic for cema-cel. Although the Foresight CLARITY™ Investigational Use Only (IUO) MRD test, powered by PhasED-Seq, has received IDE approval from the FDA allowing PhasEd-Seq to be used as part of the ALPHA3 trial, there can be no assurance that Foresight Diagnostic will be able to obtain the necessary regulatory approvals to support ALPHA3 clinical trial sites outside the US, or that we would be able to manage logistical challenges associated with timely international shipment of patient samples to Foresight's US facility for testing, all of which could delay the expansion of our ALPHA3 trial to trial sites outside the US.

Furthermore, in order to commercialize cema-cel based on the outcome of our ALPHA3 trial, the Foresight Diagnostics' MRD assay must be approved by regulatory agencies, and in some jurisdictions approved as a companion diagnostic test. A delay or failure by Foresight Diagnostics to obtain regulatory approval may delay the commercialization of cema-cel, if approved based on the outcome of our ALPHA3 trial.

Regenerative Medicine Advanced Therapy designation and fast track designation may not lead to a faster development or regulatory review or approval process and it does not increase the likelihood that our product candidates will receive marketing approval.

We have received Regenerative Medicine Advanced Therapy (RMAT) designation for ALLO-715 and cema-cel and fast track designation for ALLO-605 and ALLO-316. There is no assurance that we will be able to obtain RMAT designation or fast track designation for any of our additional product candidates. RMAT designation and fast track designation do not change the FDA's standards for product approval, and there is no assurance that such designation will result in expedited review or approval or that the approved indication will not be narrower than the indication covered by the designation. Additionally, RMAT designation and fast track designation can be revoked if the criteria for eligibility cease to be met as clinical data emerges.

We plan to seek orphan drug designation for some or all of our product candidates across various indications, but we may be unable to obtain such designations or to maintain the benefits associated with orphan drug designation, including market exclusivity, which may cause our revenue, if any, to be reduced.

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States when there is no reasonable expectation that the cost of developing and making available the drug or biologic in the United States will be recovered from sales in the United States for that drug or biologic. In order to obtain orphan drug designation, the request must be made before submitting a BLA. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval of that particular product for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a BLA, to market the same biologic (meaning, a product with the same principal molecular structural features) for the same indication for seven years, except in limited circumstances such as a showing of clinical superiority to the product with orphan drug exclusivity or if FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. As a result, even if one of our product candidates receives orphan exclusivity, the FDA can still approve other biologics that do not have the same principal molecular structural features for use in treating the same indication or disease or the same biologic for a different indication or disease during the exclusivity period. Furthermore, the FDA can waive orphan exclusivity if we are unable to manufacture sufficient supply of our product or if a subsequent applicant demonstrates clinical superiority over our product.

The FDA granted orphan drug designation to ALLO-605 and ALLO-715 for the treatment of multiple myeloma. We plan to seek orphan drug designation for additional product candidates in specific orphan indications in which there is a medically plausible basis for the use of these products, but may never receive such designations. Some of our product candidates target indications that are not orphan indications. In addition, even with orphan drug designation, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition, or if a subsequent applicant demonstrates clinical superiority over our products, if approved.

Negative public opinion and increased regulatory scrutiny of genetic research and therapies involving gene editing may damage public perception of our product candidates or adversely affect our ability to conduct our business or obtain regulatory approvals for our product candidates.*

The gene-editing technologies that we use are novel. Public perception may be influenced by claims that gene editing is unsafe, and products incorporating gene editing may not gain the acceptance of the public or the medical community. Given the previous clinical hold involved a chromosomal abnormality, our manufacturing or gene editing may be further scrutinized or may be viewed as unsafe, even though our investigation found that the abnormality was not related to our manufacturing or gene editing. In particular, our success will depend upon physicians specializing in our targeted diseases prescribing our product candidates as treatments in lieu of, or in addition to, existing, more familiar, treatments for which greater clinical data may be available. Any increase in negative perceptions of gene editing may result in fewer physicians prescribing our treatments or may reduce the willingness of patients to utilize our treatments or participate in clinical trials for our product candidates.

In addition, given the novel nature of gene-editing and cell therapy technologies, governments may place import, export or other restrictions in order to retain control or limit the use of the technologies. For instance, any limits on exporting certain of our technology to China may adversely affect Overland Therapeutics, a joint venture between us and HBP. Increased negative public opinion or more restrictive government regulations either in the United States or internationally, would have a negative effect on our business or financial condition and may delay or impair the development and commercialization of our product candidates or demand for such product candidates.

We expect the product candidates we develop will be regulated as biological products, or biologics, and therefore they may be subject to competition sooner than anticipated.*

The Biologics Price Competition and Innovation Act of 2009 (BPCIA) was enacted as part of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the Affordable Care Act) to establish an abbreviated pathway for the approval of biosimilar and interchangeable biological products. The regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as “interchangeable” based on its similarity to an approved biologic. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the reference product was approved under a BLA. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty and could have a material adverse effect on the future commercial prospects for our biological products.

We believe that any of the product candidates we develop that is approved in the United States as a biological product under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider the subject product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of the reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

The European Union provides opportunities for data and market exclusivity for innovative medicinal products in relation to which marketing authorization is granted. Upon grant of marketing authorization, innovative medicinal products are generally entitled to benefit from eight years of data exclusivity and 10 years of market exclusivity. Data exclusivity, if granted, prevents regulatory authorities in the European Union from referencing the innovator’s data to assess an application for marketing authorization for a generic or a biosimilar for eight years from the date of authorization of the innovative product, after which an application may be made for authorization of a generic or biosimilar, and the innovator’s data may be referenced. The market exclusivity period prevents a successful generic or biosimilar applicant from commercializing its

product in the European Union until 10 years have elapsed from the initial marketing authorization of the reference product in the EU. The overall ten-year period may, occasionally, be extended for a further year to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. However, there is no guarantee that a product will be considered by the EU's regulatory authorities to be a new chemical/biological entity, and products may not qualify for data exclusivity.

Even if we obtain regulatory approval of our product candidates, the products may not gain market acceptance among physicians, patients, hospitals, cancer treatment centers and others in the medical community.*

The use of engineered T cells as a potential cancer treatment is a recent development and may not become broadly accepted by physicians, patients, hospitals, cancer treatment centers and others in the medical community. We expect physicians in the large bone marrow transplant centers to be particularly important to the market acceptance of our products and we may not be able to educate them on the benefits of using our product candidates for many reasons. For example, certain of the product candidates that we will be developing target a cell surface marker that may be present on cancer cells as well as non-cancerous cells. It is possible that our product candidates may kill these non-cancerous cells, which may result in unacceptable side effects, including death. Additional factors will influence whether our product candidates are accepted in the market, including:

- the clinical indications for which our product candidates are approved;
- physicians, hospitals, cancer treatment centers and patients considering our product candidates as a safe and effective treatment;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA or other comparable foreign regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA or other comparable foreign regulatory authorities;
- the timing of market introduction of our product candidates as well as competitive products;
- the cost of treatment in relation to alternative treatments;
- the availability of coverage and adequate reimbursement by third-party payors and government authorities;
- the willingness of patients to pay out-of-pocket in the absence of coverage and adequate reimbursement by third-party payors and government authorities;
- relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies; and
- the effectiveness of our sales and marketing efforts.

If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, cancer treatment centers or others in the medical community, we will not be able to generate significant revenue. Even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete.

Coverage and reimbursement may be limited or unavailable in certain market segments for our product candidates, which could make it difficult for us to sell our product candidates, if approved, profitably.

Successful sales of our product candidates, if approved, depend on the availability of coverage and adequate reimbursement from third-party payors including governmental healthcare programs, such as Medicare and Medicaid, managed care organizations and commercial payors, among others. Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In addition, because our product candidates represent new approaches to the treatment of cancer, we cannot accurately estimate the potential revenue from our product candidates.

Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Obtaining coverage and adequate reimbursement from third-party payors is critical to new product acceptance.

The marketability of any product candidates for which we receive regulatory approval for commercial sale may suffer if government and other third-party payors fail to provide coverage and adequate reimbursement. We expect downward pressure on pharmaceutical pricing to continue. Further, coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

The advancement of healthcare reform may negatively impact our ability to sell our product candidates, if approved, profitably.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products. Such reforms could have an adverse effect on anticipated revenue from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability.

Our business could be negatively impacted by environmental, social and corporate governance (ESG) matters or our reporting of such matters.*

There is an increasing focus from certain investors, employees, partners, and other stakeholders concerning ESG matters. While we have internal efforts directed at ESG matters and preparations for any increased required future disclosures, we may be perceived to be not acting responsibly in connection with these matters, which could negatively impact us. Moreover, the SEC recently finalized rules designed to enhance and standardize climate-related disclosures. These climate disclosure rules have been challenged in court and the SEC has issued an order staying their implementation pending the outcome of judicial review. These new climate-related disclosures, if required, may significantly increase our compliance and reporting costs and may also result in disclosures that certain investors or other stakeholders deem to negatively impact our reputation or that harm our stock price. In addition, we currently do not report our environmental emissions, and lack of reporting could result in certain investors declining to invest in our common stock.

Risks Related to Our Intellectual Property

We depend on intellectual property licensed from third parties and termination of any of these licenses could result in the loss of significant rights, which would harm our business.*

We are dependent on patents, know-how and proprietary technology, both our own and licensed from others. We depend substantially on our license agreements with Pfizer, Servier and Cellectis. These licenses may be terminated upon certain conditions. Any termination of these licenses could result in the loss of significant rights and could harm our ability to commercialize our product candidates. For example, we are dependent on our license with Cellectis for gene-editing technology that is necessary to produce certain of our engineered T cells. In addition, we are reliant on Servier in-licensing from Cellectis some of the intellectual property rights they are licensing to us, including certain intellectual property rights relating to ALLO-501 and cema-cel. To the extent these licensors fail to meet their obligations under their license agreements, which we are not in control of, we may lose the benefits of our license agreements with these licensors. For instance, Cellectis has challenged and may in the future challenge certain performance by Servier, such as its development of products licensed under the Cellectis-Servier Agreement in ALL, and any failure by those parties to resolve such matters may have an adverse impact on us. In the future, we may also enter into additional license agreements that are material to the development of our product candidates.

Disputes may also arise between us and our licensors regarding intellectual property subject to a license agreement, including those related to:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes may infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;

- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates, and what activities satisfy those diligence obligations; and
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners.

For example, previously we and Servier had different interpretations regarding the respective parties' respective rights and obligations under the Original Servier Agreement. In May 2024, we entered into the Servier Amendment which clarified each parties rights and obligations. There can be no assurance that further contract interpretation issues will not arise or that we would be able to amicably resolve such issues. If other issues arise over intellectual property that we have licensed, or license in the future, it could prevent or impair our ability to maintain our current licensing arrangements on acceptable terms, and we may be unable to successfully develop and commercialize the affected product candidates.

We are generally also subject to all of the same risks with respect to protection of intellectual property that we license, as we are for intellectual property that we own, which are described below. If we or our licensors fail to adequately protect this intellectual property, our ability to commercialize products could suffer.

If our efforts to protect the proprietary nature of the intellectual property related to our technologies are not adequate, we may not be able to compete effectively in our market.

We rely upon a combination of patents, trade secret protection and license agreements to protect the intellectual property related to our technologies. Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, thus eroding our competitive position in our market.

Under the Servier Agreement, we have an exclusive license to develop and commercialize certain anti-CD19 allogeneic T cell product candidates, including cema-cel, and we hold the commercial rights to these product candidates in the United States, the European Union and the United Kingdom. We also have an exclusive worldwide license from Cellectis to its TALEN gene-editing technology for the development of allogeneic T cell product candidates directed against 15 different cancer antigens. The Servier Agreement gives us access to TALEN gene-editing technology for all product candidates under the agreement. Certain intellectual property which is covered by these agreements may have been developed with funding from the U.S. government. If so, our rights in this intellectual property may be subject to certain research and other rights of the government.

Additional patent applications have been filed, and we anticipate additional patent applications will be filed, both in the United States and in other countries, as appropriate. However, we cannot predict:

- if and when patents will issue;
- the degree and range of protection any issued patents will afford us against competitors including whether third parties will find ways to invalidate or otherwise circumvent our patents;
- whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; or
- whether we will need to initiate litigation or administrative proceedings which may be costly whether we win or lose.

Composition of matter patents for biological and pharmaceutical products such as CAR-based product candidates often provide a strong form of intellectual property protection for those types of products, as such patents provide protection without regard to any method of use. We cannot be certain that the claims in our pending patent applications covering compositions of matter of our product candidates will be considered patentable by the United States Patent and Trademark Office (USPTO) or by patent offices in foreign countries, or that the claims in any of our issued patents will be considered valid and enforceable by courts in the United States or foreign countries. Method of use patents protect the use of a product for the specified method. This type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Moreover, even if competitors do not actively promote their product for our targeted indications, physicians may prescribe these products "off-label." Although off-label prescriptions may infringe method of use patents, the practice is common and such infringement is difficult to prevent or prosecute.

The strength of patents in the biotechnology and pharmaceutical fields involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries. Even if the patents do

successfully issue, third parties may challenge the patentability, validity, enforceability or scope thereof, for example through inter partes review (IPR), post-grant review or ex parte reexamination before the USPTO, or oppositions and other comparable proceedings in foreign jurisdictions, which may result in such patents being cancelled, narrowed, invalidated or held unenforceable. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing their products to avoid being covered by our claims. If the breadth or strength of protection provided by the patents and patent applications we hold with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced. United States patent applications containing or that at any time contained a claim not entitled to a priority date before March 16, 2013 are subject to the "first to file" system implemented by the America Invents Act (2011).

This first to file system will require us to be cognizant going forward of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates. Furthermore, for United States applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third-party or instituted by the USPTO, to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. For United States applications containing a claim not entitled to priority before March 16, 2013, there is a greater level of uncertainty in the patent law in view of the passage of the America Invents Act, which brought into effect significant changes to the United States patent laws, including new procedures for challenging patent applications and issued patents.

Confidentiality agreements with employees and third parties, including any strategic partners, may not prevent unauthorized disclosure or use of trade secrets and other proprietary information.*

In addition to the protection afforded by patents, we seek to rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our product discovery and development processes that involve proprietary know-how, information or technology that is not covered by patents. Trade secrets, however, may be difficult to protect. Although we require all of our employees to assign their inventions to us, and require all of our employees and key consultants who have access to our proprietary know-how, information, or technology to enter into confidentiality agreements, we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or inappropriately used, or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. For example, we have and may continue to transfer technology to Overland Therapeutics or its affiliates in certain developing countries, and we cannot be certain that we or Overland Therapeutics or any of its affiliates will be able to protect or enforce any proprietary rights in these countries. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, operating results and financial condition.

Third-party claims of intellectual property infringement may prevent or delay our product discovery and development efforts and our ability to commercialize our product candidates.*

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing our product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may give rise to claims of infringement of the patent rights of others.

Third parties may assert that we or our collaboration partners infringe their patents or are otherwise employing their proprietary technology without authorization and may sue us and/or our collaboration partners. For example, in July 2024 Roche Molecular Systems, Inc. and Roche Sequencing Solutions, Inc. (collectively, Roche) filed lawsuits in Federal District Courts in California and Delaware against Foresight Diagnostics Inc. (Foresight Diagnostics), who is our collaboration partner, as well as Stanford University and three of Foresight's founders, alleging misappropriation of trade secrets, unfair competition and breach of contract relating to Foresight Diagnostics' PhasED-Seq Circulating Tumor DNA Platform which is being used as part of our ALPHA3 clinical trial to identify MRD+ patients. As part of the lawsuit, Roche seeks to obtain ownership of certain

Stanford patents covering PhasED-Seq that are licensed to Foresight Diagnostics. Foresight has stated that it believes that Roche's allegations are meritless and that it intends to vigorously defend against the case. If Roche obtains a preliminary injunction or prevails in its lawsuits, we may be required to seek alternative means for gaining access to the PhasED-Seq MRD assay or find an alternative MRD assay to use in the ALPHA3 trial, either of which may not be available to us on commercially reasonable terms or at all, and/or could significantly delay or prevent the completion of the trial or our plans to commercialize cema-cel as part of a 1L consolidation strategy, if approved, which could materially adversely affect our business, operating results and financial condition.

In addition, we are aware of several U.S. patents held by third parties that may be considered by those third parties to be relevant to cell-based therapies. Generally, conducting clinical trials and other development activities in the United States is not considered an act of infringement. If and when any of our product candidates is approved by the FDA, third parties may then seek to enforce their patents by filing a patent infringement lawsuit against us or our collaboration partners. Patents issued in the United States by law enjoy a presumption of validity that can be rebutted only with evidence that is "clear and convincing," a heightened standard of proof. We may not be able to prove in litigation that any patent enforced against us or one of our collaboration partners is invalid.

Additionally, there may be third-party patents of which we are currently unaware with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may be alleged to infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of our product candidates, constructs or molecules used in or formed during the manufacturing process, or any final product itself, the holders of any such patents may be able to block our ability to commercialize the product candidate unless we obtained a license under the applicable patents, or until such patents expire or they are finally determined to be held not infringed, unpatentable, invalid or unenforceable. Similarly, if any third-party patent were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy or patient selection methods, the holders of any such patent may be able to block our ability to develop and commercialize the product candidate unless we obtained a license or until such patent expires or is finally determined to be held not infringed, unpatentable, invalid or unenforceable. In either case, such a license may not be available on commercially reasonable terms or at all. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, or at all, our ability to commercialize our product candidates may be impaired or delayed, which could in turn significantly harm our business.

Parties who may make claims against us or our collaboration partners may seek and obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business and may impact our reputation. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign any of our alleged infringing products, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize our product candidates, which could harm our business significantly.

We may not be successful in obtaining or maintaining necessary rights to product components and processes for our development pipeline through acquisitions and in-licenses.

Presently we have rights to the intellectual property, through licenses from third parties and under patent applications that we own or will own, that we believe will facilitate the development of our product candidates. Because our programs may involve additional product candidates that may require the use of proprietary rights held by third parties, the growth of our business will likely depend in part on our ability to acquire, in-license or use these proprietary rights.

We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify. We may fail to acquire such rights or obtain any of these licenses at a reasonable cost or on reasonable terms, which would harm our business. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to

expend significant time and resources to develop or license replacement technology. We may need to cease use of the compositions or methods covered by such third-party intellectual property rights.

The licensing and acquisition of third-party intellectual property rights is a competitive area, and companies, which may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities.

We may be involved in lawsuits to protect or enforce our patents or the patents of our licensors, which could be expensive, time-consuming and unsuccessful.

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that one or more of our patents is not valid or is unenforceable or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly and could put one or more of our pending patent applications at risk of not issuing. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products, which may be impossible or require substantial time and monetary expenditure.

Interference proceedings provoked by third parties or brought by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our licensors. An unfavorable outcome could result in a loss of our current patent rights and could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Litigation or interference proceedings may result in a decision adverse to our interests and, even if we are successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, misappropriation of our trade secrets or confidential information, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. In such an event, our competitors might be able to enter the market, which would have a material adverse effect on our business.

The lives of our patents may not be sufficient to effectively protect our products and business.

Patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after its first effective filing date. Although various extensions may be available, the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be

open to competition from biosimilar or generic medications. In addition, although upon issuance in the United States a patent's life can be increased based on certain delays caused by the USPTO, this increase can be reduced or eliminated based on certain delays caused by the patent applicant during patent prosecution. If we do not have sufficient patent life to protect our products, our business and results of operations will be adversely affected.

We or our licensors may be subject to claims challenging the inventorship of our patents and other intellectual property.

We or our licensors may in the future be subject to claims that former employees, collaborators, or other third parties have an interest in our patents or other intellectual property as an inventor or co-inventor. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property. Such an outcome could have a material adverse effect on our business. Even if we or our licensors are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Issued patents covering our product candidates could be found unpatentable, invalid or unenforceable if challenged in court or the USPTO.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that the patent covering our product candidate, as applicable, is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include IPR, ex parte re-examination and post grant review in the United States, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover and protect our product candidates. The outcome following legal assertions of unpatentability, invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we, our patent counsel and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of unpatentability, invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection could have a material adverse impact on our business.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological and legal complexity, and is therefore costly, time-consuming and inherently uncertain. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. For example, in the 2013 case, *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.* , the U.S. Supreme Court held that certain claims to DNA molecules are not patentable. While we do not believe that any of the patents owned or licensed by us will be found invalid based on this decision, we cannot predict how future decisions by the courts, the U.S. Congress or the USPTO may impact the value of our patents.

We may not be able to protect our intellectual property rights throughout the world.*

We may not be able to protect our intellectual property rights outside the United States. Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent

protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries where Overland Therapeutics or its affiliates may do business, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biopharmaceutical products, which could make it difficult for us or Overland Therapeutics or any of its affiliates to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We have received confidential and proprietary information from third parties. In addition, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of these third parties or our employees' former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial cost and be a distraction to our management and employees.

Risks Related to Ownership of Our Common Stock

The price of our stock has been and may continue to be volatile, and you could lose all or part of your investment.

The trading price of our common stock following our IPO in October 2018 has been and is likely to continue to be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including limited trading volume. In addition to the factors discussed in this "Risk Factors" section, these factors include:

- the commencement, enrollment or results of our clinical trials of our product candidates or any future clinical trials we may conduct, or changes in the development status of our product candidates;
- our decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;
- adverse results or delays in clinical trials;
- any delay in our regulatory filings for our product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority's review of such filings, including without limitation the FDA's issuance of a "refusal to file" letter or a request for additional information;
- our failure to commercialize our product candidates;
- adverse regulatory decisions;
- changes in laws or regulations applicable to our products, including but not limited to clinical trial requirements for approvals;
- adverse developments concerning the manufacture or supply of our product candidates;
- our inability to obtain adequate product supply for any approved product or inability to do so at acceptable prices;
- our inability to establish collaborations if needed;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to immuno-oncology or related to the use of our product candidates or pre-conditioning regimen;
- introduction of new products or services offered by us or our competitors;
- changes in the status of one or more of our license or collaboration agreements, including any material disputes, amendments or terminations;

- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- our ability to effectively manage our growth;
- the size and growth of our initial cancer target markets;
- our ability to successfully treat additional types of cancers or at different stages;
- actual or anticipated variations in quarterly operating results;
- our cash position;
- our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- publication of research reports about us or our industry, or immunotherapy in particular, or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in the market valuations of similar companies;
- overall performance of the equity markets;
- sales of our common stock by us or our stockholders in the future;
- trading volume of our common stock;
- changes in accounting practices;
- ineffectiveness of our disclosure controls or internal controls;
- disagreements with our auditor or termination of an auditor engagement;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- changes in the structure of healthcare payment systems;
- significant lawsuits, including patent or stockholder litigation;
- significant business disruptions caused by health epidemics or pandemics, or natural or man-made disasters;
- general political and economic conditions; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and the Nasdaq Global Select Market and biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business, operating results or financial condition.

Our failure to establish and maintain effective internal control over financial reporting could result in material misstatements in our financial statements, our failure to meet our reporting obligations and cause investors to lose confidence in our reported financial information, which in turn could cause the trading price of our common stock to decline.

Maintaining effective disclosure controls and procedures and internal control over financial reporting are necessary for us to produce reliable financial statements. We are required, pursuant to Section 404 (Section 404) of the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley Act), to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. Complying with Section 404 requires a rigorous compliance program as well as adequate time and resources. We may not be able to complete our internal control evaluation, testing and any required remediation in a timely fashion. Additionally, if we or our auditors identify one or more material weaknesses in our internal control over financial reporting, we will not be able to assert that our internal controls are effective. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis.

In 2021, we implemented a new enterprise resource planning (ERP) system, which required the investment of significant financial and human resources. We plan to continue to implement new ERP modules, which we also expect will require significant resources. Any failure to maintain or implement new or improved internal controls related to our ERP system or otherwise could result in material weaknesses, result in material misstatements in our consolidated financial

statements and cause us to fail to meet our reporting obligations. This could cause us to lose public confidence and could cause the trading price of our common stock to decline.

For so long as we remain a non-accelerated filer, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act. An independent assessment of the effectiveness of our internal control over financial reporting could detect problems that our management's assessment might not. Undetected material weaknesses in our internal control over financial reporting could lead to financial statement restatements and require us to incur the expense of remediation.

We have identified a material weakness in our internal control over financial reporting. This material weakness could continue to adversely affect our ability to report our results of operations and financial condition accurately and in a timely manner.*

Our management is responsible for establishing and maintaining adequate internal control over financial reporting designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Our management is likewise required, on a quarterly basis, to evaluate the effectiveness of our internal controls and to disclose any changes and material weaknesses identified through such evaluation in those internal controls. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

As described elsewhere in this Quarterly Report, we have identified a material weakness in our internal control over financial reporting. As a result of this material weakness, our management has concluded that our internal control over financial reporting was not effective as of June 30, 2024. For a discussion of management's consideration of the material weakness identified, see Part I Item 4: Controls and Procedures included in this Quarterly Report.

To respond to this material weakness, we plan to devote significant effort and resources to the remediation and improvement of our internal control over financial reporting. While we have processes to identify and appropriately apply applicable accounting requirements, we continue to enhance these processes to better evaluate our research and understanding of the nuances of the complex accounting standards that apply to our financial statements, which include retaining third-party subject matter experts with significant relevant experience to help with accounting treatment of significant non-routine transactions. The elements of our remediation plan can only be accomplished over time, and we can offer no assurance that these initiatives will ultimately have the intended effects.

Any failure to maintain such internal control could adversely impact our ability to report our financial position and results from operations on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis, we could be subject to sanctions or investigations by the stock exchange on which our common stock is listed, the SEC or other regulatory authorities. In either case, a material adverse effect on our business could be the result of ineffective internal controls. Ineffective internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

We can give no assurance that the measures we are implementing will remediate the material weakness identified or that any additional material weaknesses or restatements of financial results will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of these controls. In addition, even if we are successful in strengthening our controls and procedures, in the future those controls and procedures may not be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our financial statements.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We currently anticipate that we will retain any future cash flow or earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock.

Anti-takeover provisions under our charter documents and Delaware law could delay or prevent a change of control which could limit the market price of our common stock and may prevent or frustrate attempts by our stockholders to replace or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change of control of our company or changes in our board of directors that our stockholders might consider favorable. Some of these provisions include:

- a board of directors divided into three classes serving staggered three-year terms, such that not all members of the board will be elected at one time;
- a prohibition on stockholder action through written consent, which requires that all stockholder actions be taken at a meeting of our stockholders;
- a requirement that special meetings of stockholders be called only by the chair of the board of directors, the chief executive officer, or by a majority of the total number of authorized directors;
- advance notice requirements for stockholder proposals and nominations for election to our board of directors;
- a requirement that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of not less than two-thirds of all outstanding shares of our voting stock then entitled to vote in the election of directors;
- a requirement of approval of not less than two-thirds of all outstanding shares of our voting stock to amend any bylaws by stockholder action or to amend specific provisions of our certificate of incorporation; and
- the authority of the board of directors to issue preferred stock on terms determined by the board of directors without stockholder approval and which preferred stock may include rights superior to the rights of the holders of common stock.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporate Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These anti-takeover provisions and other provisions in our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by the then-current board of directors and could also delay or impede a merger, tender offer or proxy contest involving our company. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors of your choosing or cause us to take other corporate actions you desire. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

General Risk Factors

Unstable market, economic and geo-political conditions may have serious adverse consequences on our business, financial condition and stock price.

The global credit and financial markets have experienced extreme volatility and disruptions in the past. These disruptions have resulted and may continue to result in severely diminished liquidity and credit availability, high inflation, declines in consumer confidence, disruptions in access to bank deposits or lending commitments due to bank failures and uncertainty about economic stability, declines in economic growth, and uncertainty about economic stability. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment, higher inflation, or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. Our portfolio of corporate and government bonds would also be adversely impacted. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our operations, growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive an economic downturn or rising inflation, which could directly affect our ability to attain our operating goals on schedule and on budget.

Other international and geo-political events could also have a serious adverse impact on our business. For instance, in February 2022, Russia initiated military action against Ukraine, and in October 2023, Hamas attacked Israel. In both cases, ongoing conflicts have ensued. In response to the Russian invasion, the United States and certain other countries imposed significant sanctions and trade actions against Russia and could impose further sanctions, trade restrictions, and other retaliatory actions. While we cannot predict the broader consequences, these conflicts and retaliatory and counter-retaliatory actions could

materially adversely affect global trade, currency exchange rates, inflation, regional economies, and the global economy, which in turn may increase our costs, disrupt our supply chain, impair our ability to raise or access additional capital when needed on acceptable terms, if at all, or otherwise adversely affect our business, financial condition, and results of operations.

Sales of a substantial number of shares of our common stock by our existing stockholders in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur, including by any of our directors, officers or larger stockholders, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

If securities or industry analysts issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock could be influenced by the research and reports that industry or securities analysts publish about us or our business. If any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if the clinical trials and operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

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

None.

Item 3. Defaults Upon Senior Securities.

None.

Item 4. Mine Safety Disclosures.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

Exhibit number	Description of document
3.1	Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38693), filed with the SEC on October 15, 2018).
3.2	Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K (File No. 001-38693), filed with the SEC on June 17, 2022).
3.3	Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K (File No. 001-38693), filed with the SEC on October 15, 2018).
4.1	Reference is made to Exhibits 3.1, 3.2 and 3.3.
4.2	Form of Common Stock Certificate of the Registrant (incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-227333), filed with the SEC on October 2, 2018).
10.1*‡	Share Exchange Agreement, dated May 24, 2024, by and among Allogene Overland Biopharm (CY) Limited, Overland Pharmaceutic als (CY) Inc. and Allogene Therapeutics Inc.

10.2*‡	Amended and Restated Shareholders' Agreement, dated May 24, 2024, by and among Allogene Overland Biopharm (CY) Limited, Allogene Therapeutics Inc. and HH BioPharma Holdings Ltd.
10.3*‡	First Amendment to the License Agreement, dated May 24, 2024, by and between Allogene Therapeutics Inc. and Allogene Overland BioPharm (PRC) Co., Limited.
10.4*	Amendment and Settlement Agreement, dated May 10, 2024, by and between Les Laboratoires Servier, Institut de Recherches Internationales Servier and Allogene Therapeutics, Inc.
10.5+	Securities Purchase Agreement by and among the Company and the Purchasers named therein, dated May 13, 2024 (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K (File No. 001-38693), filed with the SEC on May 14, 2024)
10.6*	Amendment No. 1 to Amended and Restated Collaboration and License Agreement, dated May 17, 2024, by and between Allogene Therapeutics, Inc. and Notch Therapeutics (Canada) Inc.
10.7*	Amendment No. 1 to Strategic Collaboration Agreement, dated April 4, 2024, by and between Allogene Therapeutics, Inc. and Foresight Diagnostics, Inc.
31.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104	The cover page from the Company's Quarterly Report on Form 10-Q has been formatted in Inline XBRL.

+ Indicates management contract or compensatory plan.
* Certain portions of this exhibit (indicated by "[***]") have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K because it is both not material and is the type of information that the Registrant treats as private or confidential.
‡ Schedules and Exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K.

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.

Date: August 7, 2024

By: */s/ David Chang*

David Chang, M.D., Ph.D.

President and Chief Executive Officer

(Principal Executive Officer)

Date: August 7, 2024

By: */s/ Geoffrey Parker*

Geoffrey Parker

Chief Financial Officer

(Principal Financial Officer)

CERTAIN INFORMATION CONTAINED IN THIS EXHIBIT, MARKED BY [***], HAS BEEN EXCLUDED BECAUSE THE REGISTRANT HAS DETERMINED THE INFORMATION IS BOTH NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

SHARE EXCHANGE AGREEMENT

THIS SHARE EXCHANGE AGREEMENT (this "**Agreement**") is entered into on May 24, 2024 (the "**Effective Date**") by and among:

(1) **Allogene Overland Biopharm (CY) Limited**, a company incorporated under the Laws of the Cayman Islands (the "**Company**");

(2) **Overland Pharmaceuticals (CY) Inc.**, a company incorporated under the Laws of the Cayman Islands, ("**Overland**"); and

(3) **Allogene Therapeutics, Inc.**, a corporation established under the Laws of the State of Delaware ("**Allogene**").

Each of the forgoing parties is referred to herein individually as a "**Party**" and collectively as the "**Parties**".

RECITALS

A. Allogene and the Company have entered into that certain Exclusive License Agreement dated December 14, 2020 by and among the Company and Allogene ("**License Agreement**"), which was later assigned by the Company to Allogene Overland BioPharma (HK) Limited ("**AOB HK**") pursuant to that certain assignment agreement dated December 15, 2020 by and between the Company and AOB HK, and subsequently assigned by AOB HK to Allogene Overland BioPharma (PRC) Co., Limited ("**AOB PRC**") pursuant to that certain assignment agreement dated April 1, 2022 by and between AOB HK and AOB PRC.

B. As consideration for the Seed Preferred Shares issued to Overland, Overland has agreed to inject an amount up to $117,000,000 into the Company to fund its operations. As of the date of this Agreement, Overland has wired [***] to the Company.

C. The Company intends to exchange with Overland, a certain number of Seed Preferred Shares, par value US$0.0001 per share, of the Company (the "**Exchange Shares**") for [***] ordinary shares of Overland Pharmaceuticals (US) Inc., a Delaware corporation ("**Overland US**"), pursuant to the terms and subject to the conditions of this Agreement.

D. Concurrently therewith, the Company, Allogene and AOB PRC propose to enter into an amendment to the License Agreement in the form attached hereto as Part I of Exhibit D (the "**Amendment to License Agreement**," the License Agreement as amended, the "**Amended License Agreement**").

E. Immediately after the completion of the exchange of the Replacement Shares for Exchange Shares pursuant to Section 2.2, Overland proposes to enter into a share distribution agreement to in the form attached hereto as Part II of Exhibit D (the "**Shares Distribution Agreement**") for the distribution in kind of all of Overland's right, title and interest in [***] Seed Preferred Shares (the "**Distributed Shares**") to HH BioPharma Holdings Ltd. ("**[***HBP***]**"). [***HBP***] will assume all rights and obligation attached to the Distributed Shares and all rights and obligations under this Agreement (for the avoidance of doubt, including but not limited to the obligation to make Quarterly Payments in accordance with the terms and conditions set forth therein) and the Amended and Restated Shareholders' Agreement.

F. The Parties intend to enter into this Agreement and make the respective representations, warranties, covenants and agreements set forth herein.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual promises hereinafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. DEFINITIONS

Unless otherwise defined in this Agreement, capitalized terms used in this Agreement shall have the meanings set forth in Exhibit A.

2. TRANSACTIONS

2.1 Authorization. On or prior to the Closing, the Company shall have authorized the issuance of the Exchange Shares, having the rights, preferences, privileges and restrictions set forth in the Amended and Restated Memorandum and Articles of Association of the Company in the form attached hereto as Part III of Exhibit D (the "**Amended and Restated Memorandum and Articles**").

2.2 Agreement to Exchange.

(i) Subject to the terms and conditions of this Agreement, the Company agrees to exchange with Overland at the Closing, and Overland agrees to exchange with the Company at the Closing, the Exchange Shares for [***] ordinary shares of Overland US, representing one hundred percent of equity interest in Overland US (the "**Replacement Shares**") at a rate of one Seed Preferred Share for [***] ordinary shares of Overland US.

(ii) Upon completion of the Closing, Allogene shall hold not less than 18.0% of the total issued and outstanding share capital of the Company on a fully-diluted, as-converted basis.

3. CLOSING

3 . 1 Closing. Subject to the terms and conditions of this Agreement, the exchange of the Replacement Shares for Exchange Shares pursuant to Section 2.2 (the "**Closing**") shall take place remotely via the exchange of documents and signatures as soon as possible and in any event within ten (10) Business Days after the fulfillment or, to the extent permissible, waiver of the conditions to the Closing as set forth in Section 5 (other than conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or, to the extent permissible, waiver of those conditions at the Closing), or such other time as the Company and Overland shall mutually agree (the "**Closing Date**"). A capitalization table setting forth the Company's complete capital structure immediately after the Closing is set forth in Part II of Exhibit B.

3.2 Procedure.

(i) Closing Deliverables by the Company. At the Closing, the Company shall deliver (or cause to be delivered) to Overland (a) a true copy of the Company's updated register of members certified by the registered office provider of the Company, reflecting the issuance of the Exchange Shares to Overland at the Closing, (b) a true copy of the Company's updated register of directors certified by the registered office provider of the Company, evidencing the appointment of three (3) representatives of [***HBP***], one (1) representative of Allogene and the Company's Chief Executive Officer (the "**CEO Director**"), (c) the original share certificate representing the Exchange Shares at the Closing, (d) a certificate of good standing of the Company issued by the Registrar of Companies of the Cayman Islands dated within twenty (20) days prior to the Closing, and (d) to the extent not previously delivered, such documents, instruments and items required to be delivered in connection with the satisfaction of the applicable closing conditions under this Agreement.

(ii) Closing Deliverables by Overland. At the Closing, Overland shall deliver (or cause to be delivered) to the Company a share certificate or certificates representing the Replacement Shares together with executed stock power(s) and assignment(s) separate from certificate in form and substance reasonably satisfactory to the Company and its counsel.

(iii) Quarterly Payments.

(a) [***]

(b) [***]

(c) [***]

(d) [***]

(iv) [***]. A [***] shall occur if Overland does not make one of its Quarterly Payments on or before [***].

4. REPRESENTATIONS AND WARRANTIES

4.1 Representations and Warranties of the Company. The Company hereby represents and warrants to Overland that each of the statements contained in Part I of Exhibit C attached hereto (the "**Company Representations and Warranties**") is true, correct and complete as of the Effective Date and the Closing Date.

4.2 Representations and Warranties of Overland. Overland hereby represents and warrants to the Company and Allogene that each of the statements contained in Part II and Part III of Exhibit C (the "**Overland Representations and Warranties**") is true, correct and complete as of the Effective Date and the Closing Date.

5. CONDITIONS

5.1 Conditions to Overland's Obligations at the Closing The obligation of Overland hereunder to consummate the Closing shall be subject to the fulfillment of, or waiver by Overland of, each of the following conditions at or prior to the Closing:

(i) Representations and Warranties. The Company Representations and Warranties shall be true, correct and complete when made, and as of the Closing Date with the same force and effect as if they were made on and as of such date.

(ii) Performance of Obligations. The Company shall have performed and complied with all covenants, agreements, obligations and conditions contained in the Transaction Documents that are required to be performed or complied with by it on or before the Closing.

(iii) Authorization and Proceedings. The execution, delivery and performance of the Transaction Documents to which the Company is a party shall have been duly authorized by all necessary action on the part of the Company. All corporate and other proceedings by the Company in connection with the transactions contemplated under this Agreement and the other Transaction Documents shall have been completed and all documents and instruments incidental to such transactions shall have been executed, delivered, or filed.

(iv) Approvals. Any and all Consents, including but not limited to all permits, authorizations, approvals, waivers, consents or permits of any Governmental Authority or any other person that are necessary for consummation of the transactions contemplated by the Transaction Documents, shall have been duly obtained prior to, and be in full force and effect as of, the Closing.

(v) No Prohibition. There shall not be in effect any applicable Law, Governmental Order or other oral or written determination or indication from any Governmental Authority, or other legal restraint or prohibition, prohibiting, suspending, delaying, objecting, restraining, enjoining, preventing or making illegal the consummation of the transactions contemplated under the Transaction Documents, and there shall not be any pending or threatened action by any Governmental Authority or third party seeking to prohibit, suspend, delay, object to, restrain, enjoin, prevent or make illegal the consummation of such transactions.

(vi) Share Distribution. Overland and [***HBP***] shall have duly executed and delivered the Share Distribution Agreement and all closing conditions under the Share Distribution Agreement shall have been fulfilled, except for the closing conditions thereunder that are intended to be fulfilled concurrently with the Closing hereunder.

(vii) Amendment to License Agreement. The Company and Allogene shall have duly executed and delivered the Amendment to License Agreement.

(viii) Amended and Restated Shareholders' Agreement. The Parties other than Overland shall have duly executed and delivered the amended and restated shareholders' agreement in the form attached hereto as Part IV of Exhibit D (the "**Amended and Restated Shareholders' Agreement**").

(ix) Amended and Restated Memorandum and Articles. The Amended and Restated Memorandum and Articles shall have been duly adopted by the Company by all necessary action of the Board and the shareholders of the Company and duly filed with the Registrar of Companies in the Cayman Islands, and the Amended and Restated Memorandum and Articles shall have become effective with no amendment as of the Closing.

(x) Indemnification Agreement. The Company shall have duly executed and delivered an indemnification agreement with each member of the Board as of the Closing, respectively, and the Shareholder that appoints such member in the form attached hereto as Part V of Exhibit D (the "**Indemnification Agreement**").

(xi) Board. As of the Closing, the Board shall consist of (a) three (3) directors appointed by [***HBP***], (b) one (1) director appointed by Allogene and (c) the CEO Director.

(xii) ESOP. As of the Closing, the Company shall have reserved 15% of the number of shares that will be outstanding immediately following the Closing, on as converted and fully diluted basis for the ESOP, inclusive of all Equity Awards.

(xiii) Closing Certificate. At the Closing, the Company shall deliver to Overland a certificate dated as of the Closing, signed by one (1) director of the Company certifying (a) that the conditions specified in Section 5.1 have been fulfilled as of the Closing, (b) that the attached copies of the resolutions of the Board of the Company approving the transactions contemplated hereby are all true and complete copies and such resolutions remain unamended and in full force and effect, and (c) that the attached copies of the resolutions of the shareholder of the Company adopting the Amended and Restated Memorandum and Articles are true and complete copies and such resolutions remain unamended and in full force and effect.

5.2 Conditions to Company's Obligations at the Closing. The obligation of the Company to consummate the Closing with respect to Overland shall be subject to the fulfillment, or waiver by both the Company and Allogene of, each of the following conditions at or prior to the Closing:

(i) Representations and Warranties. The Overland Representations and Warranties shall be true, correct and complete when made, and as of the Closing Date, with the same force and effect as if they were made on and as of such date.

(ii) Performance of Obligations. Overland shall have performed and complied with all covenants, agreements, obligations and conditions contained in the Transaction Documents that are required to be performed or complied with by it on or before the Closing.

(iii) Authorization and Proceedings. The execution, delivery and performance of the Transaction Documents to which Overland is a party shall have been duly authorized by all necessary action on the part of Overland. All corporate and other proceedings by Overland in connection with the transactions contemplated under this Agreement and the other Transaction Documents shall have been completed and all documents and instruments incidental to such transactions shall have been executed, delivered, or filed.

(iv) Amended and Restated Shareholders' Agreement. The Parties other than the Company shall have duly executed and delivered the Amended and Restated Shareholders' Agreement.

(v) No Material Adverse Effect. No occurrence, state of facts or event constituting a Material Adverse Effect shall have occurred.

(vi) Closing Certificate. At the Closing, Overland shall deliver to the Company and Allogene a certificate dated as of the Closing, signed by one (1) director of Overland certifying (a) that the conditions specified in Section 5.2 have been fulfilled as of the Closing; and (b) that the attached copies of the resolutions of the board of directors of Overland approving the transactions contemplated hereby are all true and complete copies and such resolutions remain unamended and in full force and effect.

6. COVENANTS

6.1 Satisfaction of Conditions. The Company and Overland shall use their respective reasonable best efforts to satisfy (or cause the satisfaction of) the closing conditions as set forth in Sections 5.1 and 5.2 as soon as practicable.

6.2 Confidentiality.

(i) Confidentiality Obligation. Each Party shall, and shall cause its Affiliates to, keep confidential (a) the existence and content of this Agreement, the other Transaction Documents and any related documentation, and (b) other information of a non-public nature received from any other Party or its Representatives, or prepared by such Party or its Representatives, exclusively in connection herewith or therewith (collectively, the "**Confidential Information**") unless in the case of (a) above, Overland shall agree otherwise in writing, and in the case of (b) above, the Party or Parties to which such nonpublic information relates shall consent in writing; *provided* that any Party may disclose Confidential Information or permit the disclosure of Confidential Information (A) to the extent legally compelled

(including without limitation, pursuant to any applicable tax, securities, or other Laws of any jurisdiction, rules and regulations of the New York Stock Exchange and the U.S. Securities and Exchange Commission); *provided* that such Party shall, where practicable and to the extent permitted by applicable Laws, provide the other Parties with prompt written notice of that fact, consult with the other Parties regarding such disclosure, and at the request of any other Party, seek (with the cooperation and reasonable efforts of the other Parties) a protective order, confidential treatment or other appropriate remedy; and in any event, such Party shall furnish only that portion of the information which is legally required to be disclosed and shall exercise reasonable efforts to obtain reliable assurance that confidential treatment will be accorded to such information, (B) to its Representatives, (C) in the case of Overland, to its auditors, counsel, directors, officers, employees, fund manager, shareholders and partners, and (D) to its current or bona fide prospective investors, shareholders, investment bankers and any Person otherwise providing substantial debt or equity financing to such Party, in each case of (B) through (D) above, strictly on a need-to-know basis and only where such Party advises each Person to whom any Confidential Information is so disclosed as to the confidential nature thereof and such Person is subject to appropriate nondisclosure obligations substantially similar to those set forth in this Section 6.2.

For the avoidance of doubt, "**Confidential Information**" does not include information that (i) was already in the possession of the receiving Party before such disclosure by the disclosing Party, (ii) is or becomes available to the public other than as a result of disclosure by the receiving Party in violation of this Section 6.2, (iii) is or becomes available to the receiving Party from a third party who has no confidentiality obligations to the disclosing Party, or (iv) was independently developed by the Representatives of the receiving Party who had no access to any Confidential Information.

(ii) Public Announcement. No announcement regarding the consummation of the transaction contemplated by this Agreement, the other Transaction Documents and any related documentation in a press release, conference, advertisement, announcement, professional or trade publication, mass marketing materials or otherwise to the general public may be made without the prior written consent of the Parties, except as may otherwise be required by applicable Laws or Governmental Order (including the rules and regulations of the New York Stock Exchange and the U.S. Securities and Exchange Commission), which shall require only the prior written consent of Parties over the consents of such disclosure.

(iii) Use of Name of [***HBP***]. Without the prior written consent of [***HBP***], none of the parties shall use, publish, reproduce, or refer to the name of [***HBP***], its affiliates and/or controlling persons, trademark or logo in any discussion, documents or materials, including without limitation for marketing or other purposes.

(iv) Use of Name of Allogene. Without the prior written consent of Allogene, none of the parties shall use, publish, reproduce, or refer to the name of Allogene, its affiliates and/or controlling persons, trademark or logo in any discussion, documents or materials, including without limitation for marketing or other purposes.

6.3 Survival of Representations and Warranties and Covenants. The representations and warranties and all covenants made by each Party contained in this Agreement shall survive the Closing.

6.4 Remedy for Breach of Representations and Warranties or Covenants. If there is any material inaccuracy in any representation or warranty made by Overland (or its successors or permitted assigns) in this Agreement, or any material breach of any covenant made by Overland (or its successors or permitted assigns) in this Agreement, Allogene shall have the right to terminate the Amended License Agreement in accordance with Section 12.2(f) therein. Allogene's right to terminate the Amended License Agreement in accordance with Section 12.2(f) thereof shall be its sole and exclusive remedy (whether at law, in equity, in contract, in tort or otherwise) against the Company, Overland and/or [***HBP***] and their respective Affiliates for any loss or damage suffered as a result of such inaccuracy or breach.

6.5 Overland (or its successors or permitted assigns) shall cause the Company to complete the organizational restructuring, a plan of which is set forth in Schedule 6.5 of the Disclosure Schedule, as soon as possible after the Effective and in any event no later than September 30, 2024.

7. MISCELLANEOUS

7.1 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, U.S., without giving effect to any choice of law principles that would require the application of the laws of a different jurisdiction. The application of the U.N. Convention on Contracts for the International Sale of Goods is excluded.

7.2 Binding Arbitration.

(i) All disputes under this Agreement shall be submitted by either Party for resolution in arbitration administered by the International Chamber of Commerce (the "**ICC**") pursuant to its arbitration rules and procedures then in effect.

(ii) The arbitration shall be conducted by a panel of three (3) arbitrators: within thirty (30) days after initiation of arbitration, each Party shall select one (1) person to act as arbitrator and the two Party-selected arbitrators shall select a third arbitrator (who shall be the chairperson of the arbitration panel) within thirty (30) days of their appointment. If the arbitrators selected by the Parties are unable or fail to agree upon the third arbitrator, the third arbitrator shall be appointed by ICC. If, however, the aggregate award sought by the Parties is less than US$5,000,000 and equitable relief is not sought, the arbitration shall be conducted by a single arbitrator agreed by the Parties (or appointed by ICC if the Parties cannot agree). The seat of arbitration shall be New York City, New York and the language of the proceedings shall be English.

(iii) The Parties agree that any award or decision made by the arbitral tribunal shall be final and binding upon them and may be enforced in the same manner as a judgment or order of a court of competent jurisdiction. The arbitral tribunal shall determine the dispute by applying the provisions of this Agreement and the governing law set forth in Section 7.1.

(iv) By agreeing to arbitration, the Parties do not intend to deprive any court of its jurisdiction to issue, at the request of a Party, a pre-arbitral injunction, pre-arbitral attachment or other order to avoid irreparable harm, maintain the status quo, preserve the subject matter of the dispute, or aid the arbitration proceedings and the enforcement of any award. Without prejudice to such provisional or interim remedies in aid of arbitration as may be available under the jurisdiction of a competent court, the arbitral tribunal shall have full authority to grant provisional or interim remedies and to award damages for the failure of any party to the dispute to respect the arbitral tribunal's order to that effect.

(v) EACH PARTY HERETO WAIVES ITS RIGHT TO TRIAL BY JURY OF ANY ISSUE RELATING TO ANY DISPUTE ARISING HEREUNDER.

(vi) Each Party shall bear its own attorney's fees, costs, and disbursements arising out of the arbitration, and shall pay an equal share of the fees and costs of the administrator and the arbitrator; *provided*, *however*, the arbitrator shall be authorized to determine whether a Party is the prevailing party, and if so, to award to that prevailing party reimbursement for any or all of its reasonable attorneys' fees, costs and disbursements (including, for example, expert witness fees and expenses, photocopy charges, travel expenses, etc.), or the fees and costs of the administrator and the arbitrator.

7.3 Notices. All notices which are required or permitted hereunder shall be in writing and sufficient if delivered personally, sent by facsimile (and promptly confirmed by personal delivery, registered or certified mail or overnight courier), sent by nationally-recognized overnight courier or sent by registered or certified mail, postage prepaid, return receipt requested, addressed as follows:

If to the Company:

c/o Walkers Corporate Limited
Cayman Corporate Centre
27 Hospital Road
George Town, Grand Cayman
KY1-9008, Cayman Islands
Attn: Allogene Overland Biopharm (CY) Limited – The Corporate Administrator
Fax: 1(345) 949-7886

If to Overland:

280 Utah Ave Suite 250
South San Francisco
CA 94080Attn: Sophie Chen

Email: [***]with a copy to:

Gunderson Dettmer Stough Villeneuve Franklin & Hachigian, LLP
One Marina Park Drive, Suite 900
Boston, MA 02210
Attn: Timothy H. Ehrlich, Richard Chang and Peter Qiu
Email: [***]

If to ALLO:

Address:
Allogene Therapeutics, Inc.
210 East Grand Avenue
South San Francisco, CA 94080
Attn: General Counsel
Email: [***]

with a copy to:

Address:
Goodwin Procter LLP
The New York Times Building
620 8th Avenue
New York, NY 10018
Attn: Wendy Pan
Email: [***]

or to such other address as the Party to whom notice is to be given may have furnished to the other Party in writing in accordance herewith. Any such notice shall be deemed to have been given: (a) when delivered if personally delivered or sent by facsimile on a Business Day; (b) on the Business Day after dispatch if sent by internationally-recognized overnight courier; or (c) on the fifth Business Day following the date of mailing if sent by mail.

7.4 Successors and Assigns. Except as otherwise provided herein, the terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the Parties. This Agreement, and the rights and obligations hereunder, shall not be assigned without the mutual written Consent of Overland and the Company.

7.5 Severability. In case any provision of the Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall

not in any way be affected thereby. If, however, any provision of this Agreement shall be invalid, illegal, or unenforceable under any applicable Laws in any jurisdiction, it shall, as to such jurisdiction, be deemed modified to conform to the minimum requirements of such Law.

7.6 Amendment. This Agreement may only be amended or modified by an instrument in writing signed by the Company and Overland.

7.7 Waiver. No waiver of any provision of this Agreement shall be effective unless set forth in a written instrument signed by the Party waiving such provision. No failure or delay by a Party in exercising any right, power or remedy under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of the same preclude any further exercise thereof or the exercise of any other right, power or remedy. Without limiting the foregoing, no waiver by a Party of any breach by any other Party of any provision hereof shall be deemed to be a waiver of any subsequent breach of that or any other provision hereof.

7.8 Further Assurances. Each Party shall from time to time and at all times hereafter make, do, execute, or cause or procure to be made, done and executed such further acts, deeds, conveyances, consents and assurances without further consideration, which may reasonably be required to effect the transactions contemplated by this Agreement.

7.9 Fees and Expenses. Each Party shall pay all of its own costs and expenses incurred in connection with the negotiation, execution, delivery and performance of this Agreement and other Transaction Documents and the transactions contemplated hereby and thereby.

7.10 Interpretation. For all purposes of this Agreement, except as otherwise expressly provided, (a) the defined terms shall have the meanings assigned to them in their definitions and include the plural as well as the singular, and pronouns of either gender or neuter shall include, as appropriate, the other pronoun forms, (b) all references in this Agreement to designated sections and other subdivisions are to the designated sections and other subdivisions of the body of this Agreement, and all references in this Agreement to designated exhibits are to the exhibits attached to this Agreement, (c) the words “herein”, “hereof”, and “hereunder” and other words of similar import refer to this Agreement as a whole and not to any particular section or other subdivision, (d) the titles of the sections and subdivisions of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement, (e) any reference in this Agreement to any “Party” or any other Person shall be construed so as to include its successors in title, permitted assigns and permitted transferees, (f) any reference in this Agreement to any agreement or instrument is a reference to that agreement or instrument as amended or novated, (g) the disjunctive shall be deemed to include the conjunctive, (h) “including” shall be deemed read to include “without limitation”, and (i) this Agreement is jointly prepared by the Parties and should not be interpreted against any Party by reason of authorship.

7.11 Entire Agreement. This Agreement and the other Transaction Documents constitute the entire agreement of the Parties with respect to the subject matter hereof and thereof and supersede all prior agreements and undertakings, both written and oral, among the Parties with respect to the subject matter hereof and thereof.

7.12 Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Facsimile and e-mailed copies of signatures shall be deemed to be originals for purposes of the effectiveness of this Agreement.

{The remainder of this page has been left intentionally blank}

IN WITNESS WHEREOF, the Parties have duly executed this Share Exchange Agreement as of the date first above written.

Allogene Overland Biopharm (CY) Limited

By: /s/ Ed Zhang
Name: Ed Zhang
Title: CEO

IN WITNESS WHEREOF, the Parties have duly executed this Share Exchange Agreement as of the date first above written.

Overland Pharmaceuticals (CY) Inc.

By: /s/ Ed Zhang
Name: Ed Zhang
Title: Co-Founder and CEO

IN WITNESS WHEREOF, the Party has duly executed this Share Exchange Agreement as of the date first above written.

Allogene Therapeutics, Inc.

By: /s/ David Chang
Name: David Chang
Title: CEO and President

EXHIBIT A
DEFINITIONS

"**Affiliate**"	means, with respect to any Person, (i) any other Person that, directly or indirectly, Controls, is Controlled by or is under common Control with such Person; and (ii) in the case of any individual, his spouse, child, brother, sister, parent, the immediate relatives of such spouse, trustee of any trust in which such individual or any of his immediate family members is a beneficiary object, or any entity or company Controlled by any of the aforesaid Persons.
"**Board**"	means the board of directors of the Company.
"**Business Day**"	means any day that is not a Saturday, Sunday, public holiday or other day on which commercial banks are required or authorized by Law to be closed in the People's Republic of China (mainland), Hong Kong, the Cayman Islands or the United States.
"**Consent**"	means any consent, approval, authorization, release, waiver, permit, grant, franchise, concession, license, exemption or order of, registration, certificate, declaration or filing with, or report or notice to, any Person, including any Governmental Authority.
"**Contract**"	means, a contract, agreement, undertaking, understanding, indenture, note, bond, loan, instrument, lease, mortgage, deed of trust, franchise, license, commitment, purchase order, and other legally binding arrangement, whether written or oral.

"**Control**"	means, with respect to a Person, the power or authority, whether exercised or not, to direct the business, management and policies of such Person, directly or indirectly, or by effective control whether through the ownership of voting securities or other ownership interests, by Contract or otherwise, which power or authority shall conclusively be presumed to exist upon possession of beneficial ownership or power to direct the vote of more than fifty percent (50%) of the votes entitled to be cast at a meeting of the members or shareholders of such Person or power to control the composition of more than fifty percent (50%) of the board of directors of such Person. The terms "Controlled" and "Controlling" have meanings correlative to the foregoing.
"**Equity Awards**"	means, each outstanding option or restricted share award, vested or unvested, issued to employees or directors of the Company or Overland US pursuant to an employee equity incentive plan.
"**Equity Securities**"	means, with respect to any Person that is a legal entity, any and all shares, membership interests, units, profits interests, ownership interests, equity interests, registered share capital, and other equity securities of such Person, and any right, warrant, option, call, commitment, conversion privilege, preemptive right or other right to acquire any of the foregoing, or security convertible into, exchangeable or exercisable for any of the foregoing, or any Contract providing for the acquisition of any of the foregoing.

"**Governmental Authority**"	means any government of any nation, federation, province or state or any other political subdivision thereof, any entity, authority or body exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including any governmental authority, agency, department, board, commission or instrumentality of the People's Republic of China, Hong Kong, Macau Special Administrative Region of the People's Republic of China, islands of Taiwan, Singapore or any other country, or any political subdivision thereof, any court, tribunal or arbitrator, any self-regulatory organization and the governing body of any stock exchange.
"**Governmental Order**"	means any applicable order, ruling, decision, verdict, decree, writ, subpoena, mandate, precept, command, directive, approval, award, judgment, injunction or other similar determination or finding by, before or under the supervision of any Governmental Authority.
"**Hong Kong**"	means the Hong Kong Special Administrative Region of the People's Republic of China.
"**Key Employees**"	means [***].
"**Knowledge**"	means, with respect to Overland, the actual knowledge of [***] and the knowledge such individuals would have after performing a reasonably diligent investigation with respect to the relevant matter.
"**Law**"	means any and all provisions of any applicable constitution, treaty, statute, law, regulation, ordinance, code, rule, or rule of common law, any governmental approval, concession, grant, franchise, license, agreement, directive, requirement, or other governmental restriction or any similar form of decision of, or determination by, or any formally issued written interpretation or administration of any of the foregoing by, any Governmental Authority, in each case as amended, and any and all applicable Governmental Orders.

“**Liabilities**”	means, with respect to any Person, all debts, liabilities, obligations and commitments of such Person of any nature, whether directly or indirectly, accrued or unaccrued, absolute or contingent, known or unknown, liquidated or unliquidated, or otherwise, and whether due or to become due, including those arising under any Law, Governmental Order, legal proceeding or Contract and including all costs and expenses relating thereto.
“**Lien**”	means any claim, mortgage, charge, easement, encumbrance, lease, covenant, security interest, lien, option, pledge, rights of others, title defect, adverse claim, restrictive covenant, or other restriction or limitation of any kind whatsoever (whether on use, voting, sale, transfer, disposition, receipt of income, or exercise of any attributes of ownership or otherwise), whether imposed by contract, understanding, Law, equity or otherwise.

"**Material Adverse Effect**"	means any fact, event, circumstance, change, condition, occurrence or effect that, individually or in the aggregate with all other facts, events, circumstances, changes, conditions, occurrences and effects (including any change in applicable law or the interpretation or enforcement thereof or other regulatory change that affects the Overland US), is or would reasonably be expected to (a) have a material adverse effect on the business, financial condition, assets, liabilities or results of operations of Overland US or (b) prevent or materially delay the consummation by the Share Exchange; provided, however, that the determination of whether a Material Adverse Effect shall have occurred under clause (a) above shall not take into account any fact, event, circumstance, change, condition, occurrence or effect occurring after the date hereof following or resulting from (i) geopolitical conditions, any outbreak or escalation of war or major hostilities or any act of sabotage or terrorism or natural or man-made disasters or epidemic- or pandemic-induced public health crises or other force majeure events, (ii) changes in laws, applicable accounting principles or enforcement or interpretation thereof, in each case proposed, adopted or enacted after the date of this Agreement, (iii) changes or conditions that generally affect the industry and market in which Overland US operate, (iv) changes in the financial, credit or other securities or capital markets, or in general economic, business, regulatory, legislative or political conditions, (v) any action taken (or omitted to be taken) by Overland US at the written request, or with the written consent, of Allogene or expressly required by this Agreement, (vi) any failure, in and of itself, of Overland US to meet any internal or published projections, estimates, budgets, plans or forecasts of revenues, earnings or other financial performance measures or operating statistics (it being understood that the underlying facts giving rise or contributing to such failure or change may be taken into account in determining whether there has been a Material Adverse Effect if such facts are not otherwise excluded under this definition); except, in the case of clause (i), (ii), (iii) or (iv), to the extent having a disproportionate effect on Overland US relative to other participants in the industry in which Overland US operates (in which case the incremental disproportionate impact or impacts may be taken into account in determining whether there has been a Material Adverse Effect).

"**Ordinary Shares**"	means the Company's ordinary shares of par value US$0.0001 per share, with the rights, preferences, privileges and restrictions as set forth in the Memorandum and Articles.
"**Person**"	means an individual, a partnership (including a limited liability partnership), a corporation, a company, an association, a joint stock company, a limited liability company, a trust, a joint venture, a firm, a legal person, an unincorporated organization and a Governmental Authority.
"**Representative**"	means, with respect to any Person, any director, officer, partner, member, employee, agent, consultant, advisor or other representative of such Person, including legal counsel, accountants and financial advisors.
"**Share Purchase Agreement**"	means the Share Purchase Agreement dated December 14, 2020 by and among the Company, Overland and Allogene, including all amendments thereto.
"**Shareholders' Agreement**"	means the Shareholders' Agreement dated December 14, 2020 by and among the Company, Overland and Allogene.
"**Subsidiary**"	means any corporation, partnership, limited liability company, joint stock company, joint venture or other organization or entity, whether incorporated or unincorporated, which is Controlled by the Company, including those hereafter formed or acquired, and, for the avoidance of doubt, the Subsidiaries shall include any variable interest entity over which the Company or any of its Subsidiaries effects Control pursuant to contractual arrangements and which is consolidated with the Company in accordance with generally accepted accounting principles applicable to the Company and any Subsidiaries of such variable interest entity.

"**Transaction Documents**"	means this Agreement, the Share Distribution Agreement, the Amended and Restated Memorandum and Articles, the Amended and Restated Shareholders' Agreement, the Amended License Agreement, the Indemnification Agreements, the Transition Services Agreement, the exhibits attached to any of the foregoing and each of the agreements and other documents otherwise required in connection with implementing the transactions contemplated by any of the foregoing.
"**Transition Services Agreement**"	means the transition services agreement dated on or around the date of this agreement pursuant to which [***]will provide the Company, on a transitional basis, [***].
"**Overland US' Business**"	means the business as conducted by Overland US as of the date of this Agreement, namely [***].
"**Overland US IP**"	means all patents, patent applications, registered and unregistered trademarks, trademark applications, registered and unregistered service marks, service mark applications, tradenames, copyrights, trade secrets, domain names, information and proprietary rights and processes, similar or other intellectual property rights, subject matter of any of the foregoing, tangible embodiments of any of the foregoing, licenses in, to and under any of the foregoing, and any and all such cases that are owned or used by and as are necessary to Overland US in the conduct of Overland US' Business.
"**U.S.**"	means the United States of America.
"**US$**"	means the lawful currency of the United States of America.

In addition, the following terms shall have the meanings defined for such terms in the Sections or Exhibits set forth below:

"**Agreement**"	Preamble
"**Allogene**"	Preamble
"**Amended and Restated Memorandum and Articles**"	Section 2.1
"**Amended and Restated Shareholders' Agreement**"	Section 5.1(viii)
"**Amended License Agreement**"	Section 2.2(i)
"**Closing**"	Section 3.1
"**Closing Date**"	Section 3.1
"**Company**"	Preamble
"**Confidential Information**"	Section 6.2
"**Company Representations and Warranties**"	Section 4.1
"**Effective Date**"	Preamble
"**Exchange Shares**"	Recital
"**[***HBP***]**"	Preamble
"**ICC**"	Section 7.2(i)
"**Indemnification Agreement**"	Section 5.1(x)
"**Overland**"	Preamble
"**Overland Representations and Warranties**"	Section 4.2
"**Party**" / "**Parties**"	Preamble
"**Replacement Shares**"	Section 2.2(i)

EXHIBIT B
CAPITALIZATION TABLES

Part I Immediately prior to the Closing

[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

Part II Immediately after the Closing

Name of Shareholder	[***]	[***]	**Percentage**
[*HBP***]**	[***]	[***]	**81.54%**
Allogene	[***]	[***]	**18.00%**
Granted ESOP		[***]	**0.46%**
Total	**/**	[***]	**100.00%**

Part III Immediately after the Closing and ESOP

Name of Shareholder	[***]	[***]	**Percentage**
[*HBP***]**	[***]	[***]	**69.63%**
Allogene	[***]	[***]	**15.37%**
Entire ESOP Pool	[***]	[***]	**15.00%**
Total	**/**	[***]	**100.00%**

Part IV Share Capital of Overland US

EXHIBIT C

Part I

COMPANY REPRESENTATIONS AND WARRANTIES

1 Organization, Standing and Qualification. The Company is duly incorporated or organized, validly existing and in good standing (or equivalent status in the relevant jurisdiction) under the Laws of the jurisdiction of its incorporation or organization. The Company has all requisite capacity, power and authority to own and operate its properties and to carry on its business as now conducted and as proposed to be conducted, and is duly qualified to transact business in each jurisdiction in which it conducts and proposes to conduct business.

2 Due Authorization. All actions on the part of the Company and, as applicable, their respective officers, directors and shareholders necessary for (i) the authorization, execution and delivery of, and the performance of all obligations of the Company under this Agreement and the other Transaction Documents to which it is a party have been taken or will be taken prior to the Closing; and (ii) the authorization, issuance, reservation for issuance and delivery of all the Exchange Shares at the Closing have been obtained or will have been obtained prior to the Closing. The Company has all requisite capacity, power and authority to execute and deliver this Agreement and the other Transaction Documents to which it is a party. Each Transaction Document to which the Company is a party is a valid and binding obligation of the Company, enforceable against it in accordance with its terms, subject, as to enforcement of remedies, to applicable bankruptcy, insolvency, moratorium, reorganization and similar laws affecting creditors' rights generally and to general equitable principles.

3 Approvals. All Consents which are required to be obtained by the Company in connection with the consummation of the transactions contemplated under this Agreement and the other Transaction Documents will have been obtained prior to and be effective as of the Closing.

4 Valid Issuance. The Exchange Shares, when issued, delivered and paid in accordance with the terms of this Agreement for the consideration expressed herein, will be duly and validly issued, fully paid, non-assessable, and free from any Lien. Assuming the accuracy of the representations of Overland in this Agreement, the Exchange Shares will be issued in compliance with all applicable Laws.

5 Capitalization.

5.1 The Company's capital structure as set forth on Part I of Exhibit B is complete, true and accurate immediately prior to the Closing Date.

5.2 Other than those set forth on Part I of Exhibit B, there are no outstanding Equity Securities of the Company. All presently outstanding Equity Securities of the Company

were, and the Exchange Shares will be, duly and validly issued (or subscribed for) in compliance with all applicable Laws and any preemptive rights (or similar requirements) of any Person, and are fully paid, non-assessable, and free from any Lien.

5.3 Except as contemplated in the Transaction Documents and ordinary shares and/or options or warrants granted pursuant to the ESOP, there are no options, warrants, conversion privileges or other rights, or agreements with respect to the issuance thereof, presently outstanding to purchase any of the Equity Securities of the Company. Except as contemplated by the Amended and Restated Shareholders' Agreement, no shares of the Company's outstanding share capital, or shares issuable upon exercise or exchange of any outstanding options or other shares issuable by the Company, are subject to any preemptive rights, rights of first refusal or other rights to purchase such shares (whether in favor of the Company or any other Person).

6 Exempt Offering. The offer and sale of the Exchange Shares under this Agreement are exempt from the registration or qualification requirements of all applicable securities laws and regulations, and the issuance of Ordinary Shares upon conversion of the Exchange Shares in accordance with the Memorandum and Articles will be exempt from such registration or qualification requirements.

7 No Brokers. The Company does not have any Contract with any broker, finder or similar agent with respect to the transactions contemplated by this Agreement or by any of the Transaction Documents, and none of them has incurred any Liability for any brokerage fees, agents' fees, commissions or finders' fees in connection with any of the Transaction Documents or the consummation of the transactions contemplated therein.

8 Restricted Securities. The Company understands that the Replacement Shares have not been registered under the U.S. Securities Act of 1933, as amended (the "**Act**"), by reason of a specific exemption from the registration provisions of the Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of Overland's representations as expressed herein. The Company understands that the Replacement Shares are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, the Company must hold the Replacement Shares indefinitely unless they are registered with the U.S. Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available.

8 Legend. The Company understands that the Replacement Shares, and any Equity Securities issued in respect of or exchange for the Replacement Shares may bear the following legend: "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 OF THE UNITED STATES, AS AMENDED. THE SALE, PLEDGE, HYPOTHECATION OR TRANSFER OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER SET FORTH IN A SHAREHOLDERS AGREEMENT, A COPY OF WHICH MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE COMPANY."

9 Purchase for Own Account. The Replacement Shares are acquired for the Company's own account or the account of one or more of the Company's Affiliates, not as a nominee or agent, and not with a view to or in connection with the sale or distribution of any part thereof.

10 Accredited Purchaser. The Company is an "accredited Purchaser" as such term is defined in Rule 501 under the Act.

11 Compliance. The Company has satisfied itself as to the full observance of the Laws of its jurisdiction in connection with any invitation to subscribe for the Replacement Shares, any transactions contemplated hereunder or any use of this Agreement, including (i) the legal requirements within its jurisdiction for the purchase of the Replacement Shares, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other Consents that may need to be obtained, and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale, or transfer of the Replacement Shares.

Part II

OVERLAND GENERAL REPRESENTATIONS AND WARRANTIES

1 Due Organization. Overland is duly formed, organized, validly existing and in good standing (or equivalent status in the relevant jurisdiction) under the Laws of the jurisdiction of its formation or organization.

2 Authorization. Overland has all requisite power, authority and capacity to enter into this Agreement and other Transaction Documents to which it is a party, and to perform its obligations hereunder and thereunder. Each Transaction Document to which Overland is a party, when executed and delivered by Overland, will constitute valid and legally binding obligations of it, enforceable against it in accordance with its terms, except (a) as limited by applicable bankruptcy, insolvency, moratorium, reorganization, and other Laws of general application affecting the enforcement of creditors' rights generally and (b) as limited by Laws relating to the availability of specific performance, injunctive relief, or other equitable remedies.

3 Consents and Filings. No Consent, order or authorization of or registration, qualification, designation, declaration or filing with, any Governmental Authority or any other third parties is required on the part of Overland in connection with the valid execution, delivery and consummation of the transactions contemplated by this Agreement and the Amended and Restated Shareholders' Agreement.

4 Valid Issuance. The Replacement Shares, when issued, delivered and paid in accordance with the terms of this Agreement for the consideration expressed herein, will be duly and validly issued, fully paid, non-assessable, and free from any Lien. Assuming the accuracy of the representations of the Company in this Agreement, the Replacement Shares will be issued in compliance with all applicable Laws.

5 Capitalization.

5.1 Overland US' capital structure as set forth on Part IV of Exhibit B is complete, true and accurate immediately prior to the Closing Date.

5.2 Other than those set forth on Part IV of Exhibit B, there are no outstanding Equity Securities of Overland US. All presently outstanding Equity Securities of Overland US were, and the Replacement Shares will be, duly and validly issued (or subscribed for) in compliance with all applicable Laws and any preemptive rights (or similar requirements) of any Person, and are fully paid, non-assessable, and free from any Lien.

5.3 Except as contemplated in the Transaction Documents, there are no options, warrants, conversion privileges or other rights, or agreements with respect to the issuance thereof, presently outstanding to purchase any of the Equity Securities of Overland US. Except as contemplated by the Amended and Restated Shareholders' Agreement, no shares of Overland US' outstanding share capital, or shares issuable upon exercise or exchange of

any outstanding options or other shares issuable by Overland US, are subject to any preemptive rights, rights of first refusal or other rights to purchase such shares (whether in favor of Overland US or any other Person).

6 Exempt Offering. The offer and sale of the Replacement Shares under this Agreement are exempt from the registration or qualification requirements of all applicable securities laws and regulations.

7 Restricted Securities. Overland understands that the Exchange Shares have not been registered under the U.S. Securities Act of 1933, as amended (the "**Act**"), by reason of a specific exemption from the registration provisions of the Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of Overland's representations as expressed herein. Overland understands that the Exchange Shares are "restricted securities" under applicable U.S. federal and state securities laws and that, pursuant to these laws, Overland must hold the Exchange Shares indefinitely unless they are registered with the U.S. Securities and Exchange Commission and qualified by state authorities, or an exemption from such registration and qualification requirements is available.

8 Legend. Overland understands that the Exchange Shares, and any Equity Securities issued in respect of or exchange for the Exchange Shares may bear the following legend: "THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933 OF THE UNITED STATES, AS AMENDED. THE SALE, PLEDGE, HYPOTHECATION OR TRANSFER OF THE SECURITIES REPRESENTED BY THIS CERTIFICATE IS SUBJECT TO CERTAIN RESTRICTIONS ON TRANSFER SET FORTH IN A SHAREHOLDERS AGREEMENT, A COPY OF WHICH MAY BE OBTAINED UPON WRITTEN REQUEST TO THE SECRETARY OF THE COMPANY."

9 Purchase for Own Account. The Exchange Shares are acquired for Overland's own account or the account of one or more of Overland's Affiliates, not as a nominee or agent, and not with a view to or in connection with the sale or distribution of any part thereof.

10 Accredited Purchaser. Overland (a) is an "accredited Purchaser" as such term is defined in Rule 501 under the Act, or (b) is not a "U.S. person" and is located outside of the "United States", as such terms are defined in Rule 902 of Regulation S under the Act.

1 1 Internal Policies. Overland has adopted and implemented each of the following internal policies: (i) a code of conduct governing appropriate workplace behavior, (ii) anti-corruption and anti-money-laundering policies prohibiting actions by directors, management, officers, and employees from violation of applicable anti-corruption, anti-bribery or anti-money-laundering laws, and (iii) conducting regular checks against sanction, corruption and money laundering lists for employees, contractors and strategic suppliers/partners, as appropriate. Overland provides regular trainings to its directors, management, employees in terms of each of the above policies no less than once a year.

1 2 Compliance. Overland has satisfied itself as to the full observance of the Laws of its jurisdiction in connection with any invitation to subscribe for the Exchange Shares, any transactions contemplated hereunder or any use of this Agreement, including (i) the legal requirements within its jurisdiction for the purchase of the Exchange Shares, (ii) any foreign exchange restrictions applicable to such purchase, (iii) any governmental or other Consents that may need to be obtained, and (iv) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale, or transfer of the Exchange Shares.

1 3 No Brokers. Overland does not have any Contract with any broker, finder or similar agent with respect to the transactions contemplated by this Agreement or by any of the Transaction Documents, and none of them has incurred any Liability for any brokerage fees, agents' fees, commissions or finders' fees in connection with any of the Transaction Documents or the consummation of the transactions contemplated therein.

14 Disclosure. No representation or warranty of Overland contained in this Agreement, as qualified by the Disclosure Schedule, contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained herein or therein not misleading in light of the circumstances under which they were made.

15 No Prior Breach. Except as set forth in Section 15, Part II, Exhibit C of the Disclosure Schedule, Overland has performed and complied with its obligations and covenants under the Share Purchase Agreement and the Shareholders' Agreement and did not commit any breach of any provision of the Share Purchase Agreement or the Shareholders' Agreement.

Part III

OVERLAND REPRESENTATIONS AND WARRANTIES CONCERNING OVERLAND US

1 . Organization, Good Standing, Corporate Power and Qualification. Overland US is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and has all requisite corporate power and authority to carry on its business as now conducted and as presently proposed to be conducted. Overland US is duly qualified to transact business and is in good standing in each jurisdiction in which the failure to so qualify would have a Material Adverse Effect.

2 . Subsidiary. Overland US does not currently own or control, directly or indirectly, any interest in any other corporation, partnership, trust, joint venture, limited liability company, association, or other business entity. Overland US is not a participant in any joint venture, partnership or similar arrangement.

3. Litigation. There is no claim, action, suit, proceeding, arbitration, complaint, charge or investigation pending or to Overland's Knowledge, currently threatened in writing (i) against the Overland US or any officer, director or Key Employee of Overland US arising out of their employment or board relationship with Overland or Overland US; or (ii) that would reasonably be expected to have, either individually or in the aggregate, a Material Adverse Effect. Neither Overland US nor, to Overland's Knowledge, any of its officers, directors or Key Employees is a party or is named as subject to the provisions of any order, writ, injunction, judgment or decree of any court or government agency or instrumentality (in the case of officers, directors or Key Employees, such as would affect Overland US). There is no action, suit, proceeding or investigation by Overland US pending or which Overland US intends to initiate. The foregoing includes, without limitation, actions, suits, proceedings or investigations pending or threatened in writing (or any basis therefor known to the Overland US) involving the prior employment of any of Overland US' employees, their services provided in connection with Overland US' Business, any information or techniques allegedly proprietary to any of their former employers or their obligations under any agreements with prior employers.

4. Intellectual Property.

(a) Overland US owns or possesses or can acquire on commercially reasonable terms sufficient legal rights to all Overland US IP without any known conflict with, or infringement of, the rights of others, including prior employees or consultants, or academic or medical institutions with which any of them may be affiliated now or may have been affiliated in the past.

(b) Other than with respect to commercially available software products under standard end-user object code license agreements, there are no outstanding options, licenses, agreements, claims, encumbrances or shared ownership interests of any kind relating to the Overland US IP, nor is Overland US bound by or a party to any

options, licenses or agreements of any kind with respect to the patents, trademarks, service marks, trade names, copyrights, trade secrets, licenses, information, proprietary rights and processes of any other Person. Neither Overland nor Overland US has received any communications in writing alleging that Overland US has violated, or by conducting its business, would violate any of the patents, trademarks, service marks, tradenames, copyrights, trade secrets, mask works or other proprietary rights or processes of any other Person.

(c) Overland US has obtained and possesses valid licenses to use all of the software programs present on the computers and other software-enabled electronic devices that it owns or leases or that it has otherwise provided to its employees for their use in connection with Overland US' Business.

(d) It will not be necessary to use any inventions of any of Overland US' employees or consultants (or Persons Overland US currently intends to hire) made prior to their employment by Overland US, including prior employees or consultants, or academic or medical institutions with which any of them may be affiliated now or may have been affiliated in the past. Each employee and consultant has assigned to Overland US all intellectual property rights he or she owns that are related to Overland US' Business and all intellectual property rights that he, she or it solely or jointly conceived, reduced to practice, developed or made during the period of his, her or its employment or consulting relationship with Overland US that (a) relate, at the time of conception, reduction to practice, development, or making of such intellectual property right, to Overland US' Business, (b) were developed on any amount of Overland US' time or with the use of any of Overland US' equipment, supplies, facilities or information or (c) resulted from the performance of services for Overland US.

(e) Section 4(e) of the Disclosure Schedule lists or describes all patents, trademarks and copyrights (and applications therefor), and know-how, trade secrets, inventions, biological materials, internet domain names and other proprietary information or rights owned by Overland US. No government funding, facilities of a university, college, other educational institution or research center, or funding from third parties was used in the development of any Overland US IP.

(f) To Overland's Knowledge, no Person who was involved in, or who contributed to, the creation or development of any Overland US IP, has performed services for the government, university, college, or other educational institution or research center in a manner that would affect Overland US' rights in Overland US IP.

5 . Compliance with Other Instruments. Overland US is not in violation or default (i) of any provisions of its certificate of incorporation or bylaws, (ii) of any instrument, judgment, order, writ or decree, (iii) under any note, indenture or mortgage, or (iv) under any lease, agreement, contract or purchase order to which it is a party, or (v) of any provision of federal or state statute, rule or regulation applicable to Overland US, except, with respect to clauses (i) to (v), inclusive, for any such conflict, violation, breach, default, right or

other occurrence that would not, individually or in the aggregate, be reasonably expected to have a Material Adverse Effect. The execution, delivery and performance of the Transaction Agreements and the consummation of the transactions contemplated by the Transaction Agreements will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either (i) a default under any such provision, instrument, judgment, order, writ, decree, contract or agreement; or (ii) an event which results in the creation of any lien, charge or encumbrance upon any assets of Overland US or the suspension, revocation, forfeiture, or nonrenewal of any material permit or license applicable to Overland US.

6 . Indebtedness. Overland US has not (i) incurred any indebtedness for money borrowed or incurred any other liabilities individually in excess of [***]or in excess of [***] in the aggregate, (ii) made any loans or advances to any Person, other than ordinary advances for business expenses, or (iii) sold, exchanged or otherwise disposed of any of its assets or rights, other than in the ordinary course of business. For the purposes of this section, all indebtedness, liabilities, agreements, understandings, instruments, contracts and proposed transactions involving the same Person (including Persons Overland US has reason to believe are affiliated with each other) shall be aggregated for the purpose of meeting the individual minimum dollar amounts of such section. Overland US is not a guarantor or indemnitor of any indebtedness of any other Person.

7. Certain Transactions.

(a) Other than (i) standard employee benefits generally made available to all employees, standard employee offer letters and Confidential Information Agreements (as defined below), and (ii) standard director and officer indemnification agreements approved by the board of directors of Overland US, there are no agreements, understandings or proposed transactions between Overland US and any of its officers, directors, consultants or Key Employees, or any Affiliate thereof.

(b) Overland US is not indebted, directly or indirectly, to any of its or Overland's directors, officers or employees or to their respective spouses or children or to any Affiliate of any of the foregoing, other than in connection with expenses or advances of expenses incurred in the ordinary course of business or employee relocation expenses and for other customary employee benefits made generally available to all employees. None of Overland US' directors, officers or employees, or any members of their immediate families, or any Affiliate of the foregoing are, directly or indirectly, indebted to Overland US.

8 . Property. The property and assets that Overland US owns are free and clear of all mortgages, deeds of trust, liens, loans and encumbrances, except for statutory liens for the payment of current taxes that are not yet delinquent and encumbrances and liens that arise in the ordinary course of business and do not materially impair Overland US' ownership or use of such property or assets. With respect to the property and assets Overland US leases, Overland US is in material compliance with such leases and holds a valid

leasehold interest free of any liens, claims or encumbrances other than those of the lessors of such property or assets. Overland US does not own any real property.

9 . Financial Statements. Overland has delivered to the Company and Allogene respectively Overland US' unaudited financial statements for the fiscal year ended December 31, 2022 and its unaudited financial statements as of December 31, 2023 (collectively, "**Financial Statements**"). The Financial Statements have been prepared in accordance with generally accepted accounting principles ("**GAAP**") applied on a consistent basis throughout the periods indicated, except that the unaudited Financial Statements may not contain all footnotes required by GAAP. The Financial Statements fairly present in all material respects the financial condition and operating results of Overland US as of the dates, and for the periods, indicated therein, subject in the case of the unaudited Financial Statements to normal year-end audit adjustments. Except as set forth in the Financial Statements, Overland US has no material liabilities or obligations, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to date of the last Financial Statements; (ii) obligations under contracts and commitments incurred in the ordinary course of business; and (iii) liabilities and obligations of a type or nature not required under GAAP to be reflected in the Financial Statements, which, in all such cases, individually and in the aggregate would not have a Material Adverse Effect. Overland US maintains and will continue to maintain a standard system of accounting established and administered in accordance with GAAP.

10. Employment Matters.

(a) To Overland's Knowledge, none of Overland US' employees is obligated under any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would materially interfere with such employee's ability to promote the interest of Overland US' or that would conflict with Overland US' Business. To Overland's Knowledge, neither the carrying on of Overland US' Business by the employees of Overland US, nor the conduct of Overland US' Business as now conducted and as presently proposed to be conducted, will conflict with or result in a material breach of the terms, conditions, or provisions of, or constitute a default under, any contract, covenant or instrument under which any such employee is now obligated.

(b) Overland US is not delinquent in payments to any of its employees, consultants, or independent contractors for any wages, salaries, commissions, bonuses, or other direct compensation for any service performed for it to the date hereof or amounts required to be reimbursed to such employees, consultants or independent contractors. Overland US has complied in all material respects with all applicable state and federal equal employment opportunity laws and with other laws related to employment, including those related to wages, hours, worker classification and collective bargaining. Overland US has withheld and paid to the appropriate governmental entity or is holding for payment not yet due to such governmental

entity all amounts required to be withheld from employees of Overland US and is not liable for any arrears of wages, taxes, penalties or other sums for failure to comply with any of the foregoing, except for any violation, failure or obligation that, individually or in the aggregate, would not reasonably be expected to have a Material Adverse Effect.

(c) To Overland's or Overland US' Knowledge, no Key Employee intends to terminate employment with Overland US or is otherwise likely to become unavailable to continue as a Key Employee. Overland US does not have a present intention to terminate the employment of any of the foregoing. The employment of each employee of Overland US is terminable at the will of Overland US. Except as set forth in Section 10(c) of the Disclosure Schedule or as required by law, upon termination of the employment of any such employees, no severance or other payments will become due. Except as set forth in Section 10(c) of the Disclosure Schedule, Overland US has no policy, practice, plan or program of paying severance pay or any form of severance compensation in connection with the termination of employment services.

(d) Overland US has not made any representations regarding equity incentives to any officer, employee, director or consultant that are inconsistent with the share amounts and terms set forth in the minutes of meetings of (or actions taken by unanimous written consent by) Overland US' board of directors or Overland's board of directors.

(e) Overland US has made all required contributions and has no material liability to each employee benefit plan established, sponsored or participated by Overland US, other than liability for health plan continuation coverage described in Part 6 of Title I(B) of the Employee Retirement Income Security Act of 1974, as amended, and has complied in all material respects with all applicable laws for any such employee benefit plan.

(f) Overland US is not bound by or subject to (and none of its assets or properties is bound by or subject to) any written or oral, express or implied, contract, commitment or arrangement with any labor union, and no labor union has requested or, to Overland's Knowledge, has sought to represent any of the employees, representatives or agents of Overland US. There is no strike or other labor dispute involving Overland US pending, or to Overland's Knowledge, threatened, which could have a Material Adverse Effect, nor is Overland US aware of any labor organization activity involving its employees.

11. Tax Return and Payments. There are no federal, state, county, local or foreign taxes in excess of [***] in the aggregate due and payable by Overland US which have not been timely paid. There are no accrued and unpaid federal, state, country, local or foreign taxes of Overland US in excess of [***] in the aggregate, which are due, whether or not assessed or disputed. There have been no examinations or audits of any tax returns or reports by any applicable federal, state, local or foreign governmental agency. Overland

US has duly and timely filed all federal, state, county, local and foreign tax returns required to have been filed by it and there are in effect no waivers of applicable statutes of limitations with respect to taxes for any year.

12. Insurance. Overland US has maintained in full force and effect insurance policies set forth in Section 12 of the Disclosure Schedule or as required by law.

13. Employment Agreements. Each current and former employee, consultant and officer of Overland US has executed an agreement with Overland regarding confidentiality and proprietary information substantially in the form or forms delivered to the Company and Allogene or their respective counsel (the "**Confidential Information Agreements**"). To No current or former Key Employee has excluded works or inventions from his or her assignment of inventions pursuant to such Key Employee's Confidential Information Agreement.To Overland's Knowledge, no Key Employee is in violation of any agreement described in this section.

14. Permits. Overland US has all franchises, permits, licenses and any similar authority necessary for the conduct of its business, the lack of which could reasonably be expected to have a Material Adverse Effect. Overland US is not in default in any material respect under any of such franchises, permits, licenses or other similar authority.

15. Corporate Documents. The Certificate of Incorporation and Bylaws of Overland US as of the date of this Agreement are in the form provided to the Company and Allogene. The copy of the minute books of Overland US provided to the Company and Allogene contains minutes of all meetings of director(s) and stockholder(s) and/or all actions by written consent without a meeting by the director(s) and stockholder(s) since the date of incorporation and accurately reflects in all material respects all actions by the director(s) (and any committee of directors) and stockholder(s).

16. FCPA. To Overland's Knowledge, neither Overland US nor any of its directors, officers, employees or agents have, directly or indirectly, made, offered, promised or authorized any payment or gift of any money or anything of value to or for the benefit of any "foreign official" (as such term is defined in the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "**FCPA**")), foreign political party or official thereof or candidate for foreign political office for the purpose of (i) influencing any official act or decision of such official, party or candidate, (ii) inducing such official, party or candidate to use his, her or its influence to affect any act or decision of a foreign governmental authority, or (iii) securing any improper advantage, in the case of (i), (ii) and (iii) above in order to assist Overland US in obtaining or retaining business for or with, or directing business to, any person. To Overland's Knowledge, neither Overland US nor any of its directors, officers, employees or agents have made or authorized any bribe, rebate, payoff, influence payment, kickback or other unlawful payment of funds or received or retained any funds in violation of any law, rule or regulation.

17. Export Control Laws. Overland US has conducted all export transactions in accordance with applicable provisions of United States export control laws and regulations, including

the Export Administration Regulations, the International Traffic in Arms Regulations, the regulations administered by the Office of Foreign Assets Control of the U.S. Treasury Department, and the export control laws and regulations of any other applicable jurisdiction.

18. Preclinical Studies. The studies, tests and preclinical development, if any, conducted by or on behalf of Overland US are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to accepted professional and scientific standards and applicable laws and regulations.

EXHIBIT D
FORMS

Part I - Form of Amended License Agreement

Part V - Form of Indemnification Agreement

Section 6.5 of the Disclosure Schedule

Reorganization Plan

[***]

CERTAIN INFORMATION CONTAINED IN THIS EXHIBIT, MARKED BY [***], HAS BEEN EXCLUDED BECAUSE THE REGISTRANT HAS DETERMINED THE INFORMATION IS BOTH NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDED AND RESTATED SHAREHOLDERS' AGREEMENT

THIS AMENDED AND RESTATED SHAREHOLDERS' AGREEMENT (this "**Agreement**") is entered into on May 24, 2024 by and among:

1. **Allogene Overland Biopharm (CY) Limited**, an exempted company incorporated under the laws of the Cayman Islands (the "**Company**"),

2. **Allogene Therapeutics, Inc.**, a Delaware corporation ("**Allogene**"), and

3. **HH BioPharma Holdings Ltd.,** an exempted company incorporated under the laws of the Cayman Islands (**[***HBP***]**").

Each of the parties to this Agreement is referred to herein individually as a "**Party**" and collectively as the "**Parties**". Each of Allogene and [***HBP***] is referred to herein as an "**Shareholder**" and collectively as the "**Shareholders**". Capitalized terms used herein without definition have the meanings ascribed to them in the Share Exchange Agreement or the Share Distribution Agreement, as applicable.

RECITALS

A On December 14, 2020, Allogene, Overland Pharmaceuticals (CY) Inc. ("**Overland**") and the Company entered into a Shareholders' Agreement (the "**Original Agreement**") to designate the rights and obligations of the parties thereto with respect to the ownership and transfer of the Company's shares of capital stock.

B The Parties wishes to consolidate Overland's cell therapy business with the Company (the "**Restructuring**").

C As part of the Restructuring, the Allogene, and Overland and the Company executed and delivered an share exchange agreement (the "**Share Exchange Agreement**") dated as of May 24, 2024, pursuant to which Overland intends to exchange with the Company, [***]shares of common stock of Overland Pharmaceuticals (US) Inc., a Delaware corporation, for [***]shares of Seed Preferred Shares of the Company (the "**Seed Preferred Shares**"), pursuant to the terms and subject to the conditions of the Share Exchange Agreement.

D Allogene and the Company have entered into that certain Exclusive License Agreement dated December 14, 2020 by and between the Company and Allogene ("**License Agreement**"), which was later assigned by the Company to Allogene Overland BioPharma (HK) Limited ("**AOB HK**") pursuant to that certain assignment agreement dated December 15, 2020 by and between the Company and AOB HK, and subsequently assigned by AOB HK to Allogene Overland BioPharma (PRC) Co., Limited ("**AOB PRC**") pursuant to that certain assignment agreement dated April 1, 2022 by and between AOB HK and AOB PRC.

E Concurrently herewith, Allogene and AOB PRC have entered into an amendment agreement to the License Agreement dated as of May 24, 2024 (the "**Amendment to License Agreement**," the License Agreement as amended, the "**Amended License Agreement**").

F Immediately after the completion of the exchange of the Replacement Shares for Exchange Shares pursuant to the Share Exchange Agreement, Overland proposes to enter into a share distribution agreement in the form attached hereto as Part II of Exhibit D (the "**Shares Distribution Agreement**") for the distribution in kind of all of Overland's right, title and interest in [***]Seed Preferred Shares (the "**Distributed Shares**") to [***HBP***]. [***HBP***] will assume all rights and obligations attached to the Distributed Shares and all rights and obligations under the Share Exchange Agreement (for the avoidance of doubt, including but not limited to the obligation to make Quarterly Payments in accordance with the terms and conditions set forth therein).

G Pursuant to Section 10.9 of the Original Agreement, Allogene, [***HBP***] and the Company desire to amend and restate the Original Agreement in its entirety and replace it with this Agreement.

WITNESSETH

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual promises hereinafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties intending to be legally bound hereto hereby agree as follows:

1. Definitions and Interpretation.

1.1 Certain Definitions. Capitalized terms used and not otherwise defined herein have the meaning ascribed to them below:

"**Accounting Standards**" means the generally accepted accounting principles in the United States or other intentional accounting principles approved by the Board, in each case, applied on a consistent basis.

"**Affiliate**" means, with respect to any specified Person, any other Person who, directly or indirectly, Controls, is Controlled by, or is under common Control with such Person, including, without limitation, any general partner, limited partner, member, managing member, officer, employee or director of such Person or any venture capital fund now or hereafter existing that is Controlled by one or more general partners or managing members of, or shares the same management company with, such Person. For purposes of this Agreement, none of Allogene or [***HBP***] shall be deemed to be an Affiliate of the Company, and the Company shall not be deemed an Affiliate of any of Allogene or [***HBP***].

[***]"**Board**" means the board of directors of the Company.

"**Business Day**" means any day that is not a Saturday, Sunday, legal holiday or other day on which commercial banks are required or authorized by Law to be closed in the

People's Republic of China (mainland), Hong Kong, the Cayman Islands or the United States.

[***]"**Charter Documents**" means, with respect to a particular legal entity, the articles or certificate of incorporation, formation or registration (including, if applicable, certificates of change of name), memorandum of association, articles of association, bylaws, articles of organization, limited liability company agreement, trust deed, trust instrument, operating agreement, joint venture agreement, business license, or similar or other constitutive, governing, or charter documents, or equivalent documents, of such entity.

"**Commercialization**" has the meaning ascribed thereto in the Amended License Agreement.

"**Commission**" means (i) with respect to any offering of securities in the United States, the Securities and Exchange Commission of the United States or any other federal agency at the time administering the Securities Act, and (ii) with respect to any offering of securities in a jurisdiction other than the United States, the regulatory body of the jurisdiction with authority to supervise and regulate the offering or sale of securities in that jurisdiction.

"**Control**" of a given Person means the power or authority, whether exercised or not, to direct the business, management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; provided, that such power or authority shall conclusively be presumed to exist upon possession of beneficial ownership or power to direct the vote of more than fifty percent (50%) of the votes entitled to be cast at a meeting of the members or shareholders of such Person or power to control the composition of a majority of the board of directors of such Person. The terms "**Controlled**" and "**Controlling**" have meanings correlative to the foregoing.

"**Deemed Liquidation Event**" has the meaning ascribed thereto in the Memorandum and Articles.

"**Development**" has the meaning ascribed thereto in the Amended License Agreement.

"**Equity Securities**" means, with respect to any Person that is a legal entity, any and all shares of capital stock, membership interests, units, profits interests, ownership interests, equity interests, registered capital, and other equity securities of such Person, and any right, warrant, option, call, commitment, conversion privilege, preemptive right or other right to acquire any of the foregoing, or security convertible into, exchangeable or exercisable for any of the foregoing, or any contract providing for the acquisition of any of the foregoing.

"**Exchange Act**" means the United States Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder, or any comparable law of any other jurisdiction in which the Company's Shares are subject to regulation.

"**Exempted Distribution**" means (a) the purchase, repurchase or redemption of Ordinary Shares by the Company at the lower of the then current fair market value or the original issuance price from terminated employees, officers or consultants upon such termination in accordance with the ESOP, or pursuant to the exercise of a contractual right of first refusal held by the Company, if any, or pursuant to written contractual arrangements

with the Company approved by the Board, and (b) the redemption of the Preferred Shares in connection with the conversion of such Preferred Shares into Ordinary Shares pursuant to the Memorandum and Articles.

"**Governmental Authority**" has the meaning ascribed thereto in the Amended License Agreement.

"**Governmental Order**" means any applicable order, ruling, decision, verdict, decree, writ, subpoena, mandate, precept, command, directive, consent, approval, award, judgment, injunction or other similar determination or finding by, before or under the supervision of any Governmental Authority.

"**Group Company**" means each of the Company and the Subsidiaries of the Company, including Overland Pharmaceuticals (US) Inc., a Delaware corporation, Allogene Overland Biopharm (HK) Limited, a Hong Kong corporation; Allogene Overland Biopharm (PRC) Co., Ltd., a limited company organized under the laws of the People's Republic of China; and any other Subsidiary of the Company existing on or established after the date hereof, and "**Group**" refers to all of Group Companies collectively.

"**Holder**" means holder(s) of Registrable Securities who are parties to this Agreement from time to time, and their permitted transferees that become parties to this Agreement from time to time.

"**Hong Kong**" means the Hong Kong Special Administrative Region of the People's Republic of China.

"**Indebtedness**" means, with respect to any Person, without duplication, each of the following of such Person: (i) all indebtedness for borrowed money, (ii) all obligations issued, undertaken or assumed as the deferred purchase price of property or services (other than trade payables entered into in the ordinary course of business), (iii) all reimbursement or payment obligations with respect to letters of credit, surety bonds and other similar instruments, (iv) all obligations evidenced by notes, bonds, debentures or similar instruments, including obligations so evidenced that are incurred in connection with the acquisition of properties, assets or businesses, (v) all indebtedness created or arising under any conditional sale or other title retention agreement, or incurred as financing, in either case with respect to any property or assets acquired with the proceeds of such indebtedness (even though the rights and remedies of the seller or bank under such agreement in the event of default are limited to repossession or sale of such property), (vi) all obligations that are capitalized (including capitalized lease obligations), (vii) all obligations under banker's acceptance, letter of credit or similar facilities, (viii) all obligations to purchase, redeem, retire, defease or otherwise acquire for value any Equity Securities of such Person, (ix) all obligations in respect of any interest rate swap, hedge or cap agreement, and (x) all guarantees issued in respect of the Indebtedness referred to in clauses (i) through (ix) above of any other Person, but only to the extent of the Indebtedness guaranteed.

"**Intellectual Property**" means any and all (i) patents, patent rights and applications therefor and reissues, reexaminations, continuations, continuations-in-part, divisions, and patent term extensions thereof, (ii) inventions (whether patentable or not), discoveries, improvements, technical information, know-how, trade secrets, drawings, formulations,

protocols, specifications, data, customer lists, databases, proprietary processes, technology, formulae and other know-how, (iii) registered and unregistered copyrights, copyright registrations and applications, mask works and registrations and applications therefor, author's rights and works of authorship, (iv) URLs, web sites, web pages and any part thereof, (v) trade names, trade dress, trademarks, domain names, service marks, logos, business names, and registrations and applications therefor, and the goodwill symbolized or represented by the foregoing.

"**IPO**" means an underwritten initial public offering of the Ordinary Shares (or American Depositary Shares or other securities representing its Ordinary Shares) on a U.S. national securities exchange or other internationally recognized securities exchange.

"**Law**" or "**Laws**" means any and all provisions of any applicable constitution, treaty, statute, law, regulation, ordinance, code, rule, or rule of common law, any governmental approval, concession, grant, franchise, license, agreement, directive, requirement, or other governmental restriction or any similar form of decision of, or determination by, or any formally issued written interpretation or administration of any of the foregoing by, any Governmental Authority, in each case as amended, and any and all applicable Governmental Orders.

"**Manufacturing**" has the meaning ascribed thereto in the Amended License Agreement.

"**Memorandum and Articles**" means the Memorandum and Articles of Association of the Company, as may be amended and/or restated from time to time.

"**Ordinary Shares**" has the same meaning as ascribed thereto in the Memorandum and Articles.

"**Person**" means any individual, sole proprietorship, partnership, limited partnership, limited liability company, firm, joint venture, estate, trust, unincorporated organization, association, corporation, institution, public benefit corporation, entity or governmental or regulatory authority or other enterprise or entity of any kind or nature.

"**Preferred Directors**" has the same meaning as ascribed thereto in the Memorandum and Articles.

"**Preferred Shares**" means the Seed Preferred Shares.

"**Principal Business**" means the discovery, development, licensing, registration, manufacturing, commercialization, marketing, sale and distribution of biopharmaceutical products worldwide, including but not limited to the Development and Commercialization of Products (as defined in the Amended License Agreement) in the Territory (as defined in the Amended License Agreement).

"**Products**" has the meaning ascribed thereto in the Amended License Agreement.

"**Qualified Financing**" means the issuance or sale of Equity Securities of the Company at a per share price no less than the Updated Seed Preferred Adjustment Price.

"**Qualified IPO**" or "**QIPO**" means an IPO with: (a) gross proceeds to the Company (before payment of underwriters' discounts, commissions and offering expenses) of not less than US$[***], and (b) a total pre-offering market capitalization of the Company of not less than US$[***], unless otherwise approved by the Board of the Directors.

"**Registrable Securities**" means (i) the Ordinary Shares issued or issuable upon conversion of the Preferred Shares and (ii) any Ordinary Shares of the Company issued or issuable as a dividend or other distribution with respect to, in exchange for, or in replacement of, the shares referenced in (i) herein; excluding in all cases, however, any of the foregoing sold by a Person in a transaction other than an assignment pursuant to Section 10.3. For purposes of this Agreement, Registrable Securities shall cease to be Registrable Securities when such Registrable Securities have been disposed of pursuant to an effective registration statement or sold pursuant to SEC Rule 144.

"**Related Parties**" means any of the following: (i) any Shareholder or any shareholder of any other Group Company, which beneficially owns no less than five percent (5%) of the voting securities or ownership interests in the Company or such other Group Company, as the case may be (each, a "**Substantial Shareholder**"), other than any Group Company; (ii) any director or executive officer of any Group Company; (iii) any Person in which any Substantial Shareholder, or director or executive officer of any Group Company, beneficially owns no less than five percent (5%) of the voting securities or ownership interest; and (iv) an relative or spouse of any of the foregoing Persons.

"**Securities Act**" means the United States Securities Act of 1933, as amended and interpreted from time to time, and the rules and regulations promulgated thereunder, or comparable law in a jurisdiction other than the United States.

"**Seed Preferred Shares**" has the same meaning as ascribed thereto in the Memorandum and Articles.

"**Shares**" means the Ordinary Shares and the Preferred Shares collectively.

"**SEC Rule 144**" means Rule 144 promulgated by the Commission under the Securities Act (or comparable law in a jurisdiction other than the United States).

"**Subsidiary**" means, with respect to any given Person, any other Person that is Controlled directly or indirectly by such given Person.

"**Transaction Documents**" has the meaning ascribed thereto in the Share Exchange Agreement.

"**Transfer**" means sell, assign, transfer, pledge, hypothecate, or otherwise encumber or dispose of in any way or otherwise grant any interest or right with respect to all or any part of any interest in any equity securities.

"**Third Party**" shall mean any entity other than the Parties and their Affiliates.

"**Updated Seed Preferred Adjustment Price**" has the same meaning as ascribed thereto in the Memorandum and Articles.

"**U.S.**" means the United States of America.

1.2 Other Definitions. In addition, the following terms have the meanings defined for such terms in the Sections set forth below:

"**Agreement**"	Preamble
"**Allogene**"	Preamble
"**Allogene Designees**"	Section 3.1
"**Amended License Agreement**"	Recitals
"**Available New Securities**"	Section 7.4
"**CEO Director**"	Section 3.1
"**Company**"	Preamble
"**Confidential Information**"	Section 9.3(i)
"**Deadlock**"	Section 3.4
"**Dispute**"	Section 10.5(i)
"**ESOP**"	Section 7.3(i)
"**Effective Date**"	Section 10.18
"**Fully Exercising Shareholder**"	Section 7.4
"**F-3 Initiating Holders**"	Section 5.4
"**[***HBP***]**"	Preamble
"**[***HBP***] Designees**"	Section 3.1
"**ICC**"	Section 10.5(ii)(a)
"**Initiating Holders**"	Section 5.2(i)
"**Investor Directors**"	Section 3.1(iv)
"**Shareholder**"	Preamble
"**Shareholder Indemnitors**"	Section 9.6
"**New Securities**"	Section 7.3
"**Notice Period**"	Section 7.4
"**Overland**"	Recitals
"**Participation Notice**"	Section 7.4
"**Party(ies)**"	Preamble
"**Preemptive Right**"	Section 7.1
"**Pro Rata Share**"	Section 7.2
"**Prohibited Payment**"	Section 9.4
"**Propose Purchaser**"	Section 8
"**Public Official**"	Section 9.4
"**Remaining New Securities**"	Section 7.4
"**Rights Holder**"	Section 7.1
"**Share Exchange Agreement**"	Recitals
"**Tagged Shareholder**"	Section 8
"**Tagged Shares**"	Section 8
"**Tag-Along Election Notice**"	Section 8.1
"**Tag-Along Number**"	Section 8.3
"**Tag-Along Right**"	Section 8
"**Transfer Notice**"	Section 8
"**Violation**"	Section 5.9(i)

1.3 Interpretation. For all purposes of this Agreement, except as otherwise expressly herein provided, (i) the terms defined in this Section 1 shall have the meanings

assigned to them in this Section 1 and include the plural as well as the singular, (ii) all accounting terms not otherwise defined herein have the meanings assigned under the Accounting Standards, (iii) all references in this Agreement to designated Sections and other subdivisions are to the designated Sections and other subdivisions of the body of this Agreement, (iv) pronouns of either gender or neuter shall include, as appropriate, the other pronoun forms, (v) the words "herein," "hereof" and "hereunder" and other words of similar import refer to this Agreement as a whole and not to any particular Section or other subdivision, (vi) all references in this Agreement to designated Schedules, Exhibits and Appendices are to the Schedules, Exhibits and Appendices attached to this Agreement, (vii) references to this Agreement, any other Transaction Documents and any other document shall be construed as references to such document as the same may be amended, supplemented or novated from time to time, (viii) the phrase "directly or indirectly" means directly, or indirectly through one or more intermediate Persons or through contractual or other arrangements, and "direct or indirect" has the correlative meaning, (ix) the term "voting power" refers to the number of votes attributable to the Shares (on an as-converted basis) in accordance with the terms of the Memorandum and Articles, (x) the headings used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement, (xi) references to laws include any such law modifying, re-enacting, extending or made pursuant to the same or which is modified, re-enacted, or extended by the same or pursuant to which the same is made, and (xii) all references to dollars or to "US$" are to currency of the United States of America (and shall be deemed to include reference to the equivalent amount in other currencies).

2. Operations and Management. [***HBP***] and Allogene shall use good faith efforts in collaborating with each other in helping the Company with its initial operations and adopting and implementing its business plans.

3. Election of Directors.

3.1 Board of Directors. Each Shareholder agrees to vote, or cause to be voted, all Shares owned by such Shareholder, or over which such Shareholder has voting control, from time to time and at all times, in whatever manner as shall be necessary to ensure that (a) the size of the Board shall remain at least five (5) directors; and (b) at each annual or special meeting of shareholders at which an election of directors is held or pursuant to any written consent of the shareholders, the following persons shall be elected to the Board:

(i) one (1) Preferred Director designated from time to time by [***HBP***], for so long as [***HBP***] or its Affiliates hold at least [***] of Ordinary Shares issued or issuable upon the conversion of the Preferred Shares beneficially owned by [***HBP***] or its Affiliates as of the date of this Agreement (as adjusted in connection with share splits or share consolidation, reclassification or other similar event), which person shall serve as the chair of the Board;

(ii) a second Preferred Director designated from time to time by [***HBP***], for so long as [***HBP***] or its Affiliates hold at least [***]of Ordinary Shares issued or issuable upon the conversion of the Preferred Shares beneficially owned by [***HBP***] or its Affiliates as of the date of this Agreement (as adjusted in connection with share splits or share consolidation, reclassification or other similar event);

(iii) a third Preferred Director designated from time to time by [***HBP***], for so long as [***HBP***] or its Affiliates hold at least [***] of Ordinary Shares issued or issuable upon the conversion of the Preferred Shares beneficially owned by [***HBP***] or its Affiliates as of the date of this Agreement (as adjusted in connection with share splits or share consolidation, reclassification or other similar event) (together with the Preferred Director referenced in Sections 3.1(i) and (ii), the "**[***HBP***] Designees**");

(iv) one (1) Preferred Director designated from time to time by Allogene, for so long as Allogene or its Affiliates hold at least [***]of Ordinary Shares issued or issuable upon the conversion of the Preferred Shares beneficially owned by Allogene or its Affiliates as of the date of this Agreement (as adjusted in connection with share splits or share consolidation, reclassification or other similar event) (the "**Allogene Designee**" and such parties, together with the [***HBP***] Designees, the "**Investor Directors**"); and

(v) the Company's Chief Executive Officer (the "**CEO Director**"), which person shall be Ed ZHANG as of the date of this Agreement, provided that if for any reason the CEO Director shall cease to serve as the Chief Executive Officer of the Company, each of the Shareholders shall promptly vote its respective Shares (i) to remove the former Chief Executive Officer of the Company from the Board if such person has not resigned as a member of the Board; and (ii) to elect such person's replacement as Chief Executive Officer of the Company as the new CEO Director.

3.2 Voting Agreements

(i) With respect to each election of directors of the Board, each holder of voting securities of the Company shall vote at each meeting of shareholders of the Company, or in lieu of any such meeting shall give such holder's written consent with respect to, as the case may be, all of such holder's voting securities of the Company as may be necessary (i) to ensure that the authorized size of the Board shall be at least five (5) directors, (ii) to cause the election or re-election as members of the Board, and during such period to continue in office, each of the individuals designated pursuant to Section 3.1, and (iii) against any nominees not designated pursuant to Section 3.1.

(ii) Any director designated pursuant to Section 3.1 may be removed from the Board, either for or without cause, upon written request of the Person or class of Persons then entitled to designate such director pursuant to Section 3.1, and the Parties agree not to seek, vote for or otherwise effect the removal of any such director without such written request. Any Person or group of Persons then entitled to designate any individual to be elected as a director on the Board shall have the exclusive right at any time or from time to time to fill any vacancy caused by the death, disability, retirement, resignation or removal of any director occupying such position or any other vacancy therein. Each holder of voting securities of the Company agrees to always vote such holder's respective voting securities of the Company at a meeting of the members of the Company (and given written consents in lieu thereof) in support of the foregoing.

3.3 Quorum. The Board shall hold no less than one (1) board meeting during each fiscal quarter.A quorum shall be constituted (whether in person or by means of a conference telephone or any other equipment which allows all participants in the meeting to speak to and hear each other simultaneously) with (a) the presence of at least one (1) [***HBP***]

Designee for so long as [***HBP***] is entitled to appoint a designate to the Board and (b) the presence of the Allogene Designee for so long as Allogene is entitled to appoint a designee to the Board. If the quorum shall not be established within half an hour from the time appointed for the meeting, the meeting shall stand adjourned to the same day in the next week at the same time and place or to such other time or such other place as at least the chairman of the Board, and, if at the adjourned meeting, the Directors required to be present under this Section 3.3 for such meeting to proceed is not present within one hour from the time appointed for the meeting, then the presence of a majority of all Directors of the Board then in office shall constitute quorum.

3.4 Board Voting; Deadlocks. Subject to Section 4, questions arising at any meeting of the Board shall be decided by a majority of votes present at such meeting (and at any Board meeting each Director may exercise one vote), *provided*, that in case of an equality of votes (a "**Deadlock**"), the chair of the Board shall not have a second or casting vote.

3.5 Committees. Each of the Preferred Directors is entitled to sit on each committee of the Board.

3.6 Expenses. The Company will promptly pay or reimburse each non-employee Board member for all reasonable out-of-pocket expenses incurred in connection with attending Board or committee meetings and otherwise performing their duties as directors and committee members.

4. Protective Provisions.

4.1 Protective Provisions at Shareholder Level. Notwithstanding anything to the contrary provided herein, and in addition to and without prejudice to any other vote, consent or approval that may be required in the Memorandum and Articles or other Transaction Documents and applicable Laws, (a) so long as Allogene or its Affiliates hold at least [***] of the Ordinary Shares issued or issuable upon the conversion of the Preferred Shares beneficially owned by Allogene or its Affiliates as of the date of this Agreement and (b) so long as [***HBP***] or its Affiliates hold at least [***] of the Ordinary Shares issued or issuable upon the conversion of the Preferred Shares beneficially owned by [***HBP***] or its Affiliates as of the date of this Agreement (in each case, as adjusted in connection with share splits or share consolidation, reclassification or other similar event), no Group Company shall, directly or indirectly, by amendment, merger, consolidation or otherwise, take any of the following actions unless approved in writing by Allogene and [***HBP***] (as applicable): [***]

4.2 Protective Provisions at Director Level. Notwithstanding anything to the contrary provided herein, and in addition to and without prejudice to any other vote, consent or approval that may be required in the Memorandum and Articles or other Transaction Documents and applicable Laws, no Group Company shall, directly or indirectly, by amendment, merger, consolidation or otherwise, take any of the following actions unless approved by the Board, including (a) the Allogene Designee so long as there is an Allogene Designee on the Board and (b) a majority of the [***HBP***] Designees so long as there are any [***HBP***] Designees on the Board: [***]

5. Registration Rights.

5.1 Applicability of Rights; Non-U.S. Registrations. The Holders shall be entitled to the following rights set forth in the provisions of this Section 5 with respect to any potential public offering of the Company's Ordinary Shares in the United States and shall be entitled to reasonably analogous or equivalent rights with respect to any other offering of the Company's securities in any other jurisdiction pursuant to which the Company undertakes to publicly offer or list such securities for trading on a recognized securities exchange. For the purposes of this Section 5, reference to registration of securities under the Securities Act and the Exchange Act shall be deemed to mean the equivalent registration in a jurisdiction other than the United States as designated by such Holders, it being understood and agreed that in each such case all references in this Agreement to the Securities Act, the Exchange Act and rules, forms of registration statements and registration of securities thereunder, U.S. law and the SEC, shall be deemed to refer, to the equivalent statutes, rules, forms of registration statements, registration of securities and laws of and equivalent government authority in the applicable non-U.S. jurisdiction.

5.2 Request for Registration.

(i) Subject to the conditions of this Section 5.2, if the Company shall receive at any time after six (6) months following the effective date of the registration statement for the IPO, a written request from the Holders of [***]or more of the Registrable Securities then outstanding (for purposes of this Section 5.2, the "**Initiating Holders**") that the Company file a registration statement under the Securities Act covering the registration of at least [***]of the Registrable Securities then outstanding, then the Company shall, within twenty (20) days of the receipt thereof, give written notice of such request to all Holders, and subject to the limitations of this Section 5.2, use commercially reasonable efforts to effect, as soon as practicable, the registration under the Securities Act of all Registrable Securities that the Holders request to be registered in a written request received by the Company within twenty (20) days of the mailing of the Company's notice pursuant to this Section 5.2(i).

(ii) If the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 5.2, and the Company shall include such information in the written notice referred to in Section 5.2(i). In such event the right of any Holder to include its Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting (unless otherwise mutually agreed by a majority in interest of the Initiating Holders and such Holder) to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by the Company. Notwithstanding any other provision of this Section 5.2, if the underwriter advises the Company that marketing factors require a limitation on the number of securities underwritten (including Registrable Securities), then the Company shall so advise all Holders of Registrable Securities that would otherwise be underwritten pursuant hereto, and the number of Shares that may be included in the underwriting shall be allocated to the Holders of such Registrable Securities pro rata based on the number of Registrable Securities held by all such Holders (including the Initiating Holders). In no event shall any Registrable Securities be excluded from such underwriting unless all other securities are first

excluded. Any Registrable Securities excluded or withdrawn from such underwriting shall be withdrawn from the registration.

(iii) Notwithstanding the foregoing, the Company shall not be required to effect a registration pursuant to this Section 5.2:

(a) after the Company has effected two (2) registrations pursuant to this Section 5.2, and such registrations have been declared or ordered effective;

(b) If the Company has effected a registration pursuant to this Section 5.2 within the preceding twelve (12) months, and such registration has been declared or ordered effective;

(c) during the period starting with the date sixty (60) days prior to the Company's good faith estimate of the date of the filing of, and ending on a date one hundred eighty (180) days following the effective date of, a Company-initiated registration subject to Section 5.3, provided that the Company is actively employing in good faith all commercially reasonable efforts to cause such registration statement to become effective;

(d) if the Initiating Holders propose to dispose of Registrable Securities that may be registered on Form F-3 pursuant to Section 5.4;

(e) if the Company shall furnish to Holders requesting a registration pursuant to this Section 5.2 a certificate signed by the CEO or chair of the Board stating that in the good faith judgment of the Board, it would be seriously detrimental to the Company and its members for such registration statement to be effected at such time, in which event the Company shall have the right to defer such filing for a period of not more than ninety (90) days after receipt of the request of the Initiating Holders, provided that the Company shall not register any other of its Shares during such ninety (90) days period; or

(f) in any particular jurisdiction in which the Company would be required to execute a general consent to service of process in effecting such registration, unless the Company is already subject to service in such jurisdiction and except as may be required under the Securities Act or pursuant to applicable securities laws in other jurisdictions, as the case may be.

5.3 Company Registration.

(i) If (but without any obligation to do so) the Company proposes to register (including for this purpose a registration effected by the Company for members other than the Holders) any of its Shares or other securities under the Securities Act in connection with the public offering of such securities (other than (i) a registration relating to a demand pursuant to Section 5.2 or (ii) a registration relating solely to the sale of securities of participants in a Company equity incentive plan, a registration relating to a corporate reorganization or transaction under Rule 145 of the Securities Act, a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities, or a registration in

which the only Ordinary Shares being registered are Ordinary Shares issuable upon conversion of debt securities that are also being registered), the Company shall, at such time, promptly give each Holder written notice of such registration. Upon the written request of each Holder given within twenty (20) days after mailing of such notice by the Company, the Company shall, subject to the provisions of Section 5.3(iii), use all commercially reasonable efforts to cause to be registered under the Securities Act all of the Registrable Securities that each such Holder requests to be registered.

(ii) **Right to Terminate Registration**. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 5.3 prior to the effectiveness of such registration whether or not any Holder has elected to include securities in such registration. The expenses of such withdrawn registration shall be borne by the Company in accordance with Section 5.7 hereof.

(iii) **Underwriting Requirements**. If a registration statement under which the Company gives notice under this Section 5.3 is for an underwritten offering, the Company shall not be required under thisSection 5.3 to include any of the Holders' securities in such underwriting unless they accept the terms of the underwriting as agreed upon between the Company and the underwriters selected by the Company (or by other persons entitled to select the underwriters) and enter into an underwriting agreement in customary form with such underwriters, and then only in such quantity as the underwriters determine in their sole discretion will not jeopardize the success of the offering by the Company. If the total amount of securities, including Registrable Securities, requested by the members of the Company to be included in such offering exceeds the amount of securities sold other than by the Company that the underwriters determine in their sole discretion is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, that the underwriters determine in their sole discretion will not jeopardize the success of the offering. In no event shall any Registrable Securities be excluded from such offering unless all other members' securities have been first excluded. In the event that the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be apportioned pro rata among the selling Holders based on the number of Registrable Securities held by all selling Holders or in such other proportions as shall mutually be agreed to by all such selling Holders. Notwithstanding the foregoing, in no event shall the amount of securities of the selling Holders included in the offering be reduced below [***]of the total amount of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded if the underwriters make the determination described above and no other member's securities are included in such offering. For purposes of the preceding sentence concerning apportionment, for any selling shareholder that is a Holder of Registrable Securities and that is a venture capital fund, partnership or corporation, the affiliated venture capital funds, partners, retired partners and holders of such Holder, or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate amount of Registrable Securities owned by all such related entities and individuals.

5.4 Form F-3 Registration. In case the Company shall receive from the Holders of at least [***]of the Registrable Securities (for purposes of this Section 5.4, the "***F-3***

Initiating Holders") a written request or requests that the Company effect a registration on Form F-3 (or an equivalent registration in a jurisdiction outside of the United States) and any related qualification or compliance with respect to all or a part of the Registrable Securities owned by such Holder or Holders, the Company shall:

(i) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders; and

(ii) use all commercially reasonable efforts to effect, as soon as practicable, such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holders joining in such request as are specified in a written request given within fifteen (15) days after receipt of such written notice from the Company, provided, however, that the Company shall not be obligated to effect any such registration, qualification or compliance, pursuant to this Section 5.4:

(a) if Form F-3 is not available for such offering by the Holders;

(b) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and such other securities (if any) at an aggregate price to the public (net of any underwriters' discounts or commissions) of less than [***];

(c) if the Company shall furnish to all Holders requesting a registration statement pursuant to this Section 5.4 a certificate signed by the Company's CEO or chairman of the Board stating that in the good faith judgment of the Board, it would be seriously detrimental to the Company and its members for such registration statement to be effected at such time, in which event the Company shall have the right to defer such filing for a period of not more than ninety (90) days after receipt of the request of the F-3 Initiating Holders, provided that such right shall be exercised by the Company not more than once in any twelve (12) month period and provided further that the Company shall not register any securities for the account of itself or any other shareholder during such ninety (90) day period;

(d) after the Company has effected four (4) registrations pursuant to this Section 5.4, and such registrations have been declared or ordered effective;

(e) if the Company has, within the six (6) month period preceding the date of such request, already effected a registration for the Holders pursuant to this Section 5.4; or

(f) in any particular jurisdiction in which the Company would be required to execute a general consent to service of process in effecting such registration, unless the Company is already subject to service in such jurisdiction and except as may be required under the Securities Act or pursuant to applicable securities laws in other jurisdictions, as the case may be.

(iii) If the F-3 Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 5.4 and the Company shall include such information in the written notice referred to in Section 5.4(i). The provisions of Section 5.2(ii) shall be applicable to such request (with the substitution of Section 5.4 for references to Section 5.2).

(iv) Subject to the foregoing, the Company shall use its commercially reasonable efforts to file a registration statement covering the Registrable Securities and other securities so requested to be registered as soon as practicable after receipt of the request or requests of the F-3 Initiating Holders. Registrations effected pursuant to this Section 5.4 shall not be counted as requests for registration effected pursuant to Section 5.2.

5.5 Obligations of the Company. Whenever required under this Section 5 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(i) prepare and file with the Commission a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective, and keep such registration statement effective for a period of up to ninety (90) days or, in the case of Registrable Securities registered under Form F-3 in accordance with Rule 415 under the Securities Act or a successor rule, until the distribution contemplated in the registration statement has been completed; provided, however, that (i) such ninety (90) day period shall be extended for a period of time equal to the period any Holder refrains from selling any securities included in such registration at the request of the underwriter(s), and (ii) in the case of any registration of Registrable Securities on Form F-3 which are intended to be offered on a continuous or delayed basis, such ninety (90) day period shall be extended, if necessary, to keep the registration statement effective until all such Registrable Securities are sold;

(ii) prepare and file with the Commission such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Securities Act with respect to the disposition of all securities covered by such registration statement;

(iii) furnish to the Holders such number of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Securities Act, and such other documents as they may reasonably request in order to facilitate the disposition of the Registrable Securities owned by them that are included in such registration;

(iv) use all commercially reasonable efforts to register and qualify the securities covered by such registration statement under such other securities or blue sky laws of such jurisdictions as shall be reasonably requested by the Holders, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(v) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement in usual and customary form, with the managing underwriter(s) of such offering;

(vi) notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Securities Act of (i) the issuance of any stop order by the Commission in respect of such registration statement, or (ii) the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing;

(vii) cause all such Registrable Securities registered pursuant to this Section 5 to be listed on each securities exchange on which similar securities issued by the Company are then listed, if any;

(viii) provide a transfer agent and registrar for all Registrable Securities registered pursuant hereunder and a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration.

Notwithstanding the provisions of this Section 5, the Company shall be entitled to postpone or suspend, for a reasonable period of time, the filing, effectiveness or use of, or trading under, any registration statement if the Company shall determine that any such filing or the sale of any securities pursuant to such registration statement would in the good faith judgment of the Board: (i) materially impede, delay or interfere with any material pending or proposed financing, acquisition, corporate reorganization or other similar transaction involving the Company for which the Board has authorized negotiations; (ii) materially adversely impair the consummation of any pending or proposed material offering or sale of any class of securities by the Company; or (iii) require disclosure of material nonpublic information that, if disclosed at such time, would be materially harmful to the interests of the Company and its shareholders; provided, however, that during any such period all executive officers and directors of the Company are also prohibited from selling securities of the Company (or any security of any of the Company's subsidiaries or affiliates). In the event of the suspension of effectiveness of any registration statement pursuant to this Section 5.5, the applicable time period during which such registration statement is to remain effective shall be extended by that number of days equal to the number of days the effectiveness of such registration statement was suspended.

5.6 Information from Holder. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 5 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be reasonably required to effect the registration of such Holder's Registrable Securities.

5.7 Expenses of Registration. All expenses other than (i) underwriting discounts, (ii) expenses of any legal counsel selected by the Selling Holders to represent them in connection with the sale of the Registrable Securities, and (iii) commissions incurred in

connection with registrations, filings or qualifications pursuant toSections 5.2, 5.3 and 5.4, including, without limitation, all registration, filing and qualification fees, printers' and accounting fees, fees and disbursements of counsel for the Company, shall be borne by the Company. Notwithstanding the foregoing, the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 5.2 or Section 5.4 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all participating Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless, in the case of a registration requested under Section 5.2, the Holders of a majority of the Registrable Securities agree to forfeit their right to one (1) demand registration pursuant to Section 5.2 and provided, however, that if at the time of such withdrawal, the Holders have learned of a material adverse change in the condition, business or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness following disclosure by the Company of such material adverse change, then the Holders shall not be required to pay any of such expenses and shall retain their rights pursuant to Sections 5.2 and 5.4.

5.8 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 3.

5.9 Indemnification. In the event any Registrable Securities are included in a registration statement under this Section 5:

(i) To the extent permitted by applicable law, the Company will indemnify and hold harmless each Holder and its Affiliates, its and their partners, officers, directors, legal counsel and accountants, and any underwriter (as defined in the Securities Act) for such person and each person, if any, who controls such person or underwriter within the meaning of the Securities Act or the Exchange Act, against any losses, claims, damages, or liabilities (joint or several) to which they may become subject under the Securities Act, the Exchange Act or other United States federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively a "***Violation***"): (i) any untrue statement or alleged untrue statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any United States federal or state securities law or any rule or regulation promulgated under the Securities Act, the Exchange Act or any United States federal or state securities law in connection with the offering covered by such registration statement; and the Company will reimburse each such Holder, underwriter, controlling person or other aforementioned person for any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability or action as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 5.9(i) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Company

(which consent shall not be unreasonably withheld), nor shall the Company be liable in any such case for any such loss, claim, damage, liability or action to the extent that it arises out of or is based upon a Violation that occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by any such Holder, underwriter, controlling person or other aforementioned person.

(ii) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each person, if any, who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter, any other Holder selling securities in such registration statement and any controlling person of any such underwriter or other Holder, against any losses, claims, damages or liabilities (joint or several) to which any of the foregoing persons may become subject, under the Securities Act, the Exchange Act or other United States federal or state law, insofar as such losses, claims, damages or liabilities (or actions in respect thereto) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration; and each such Holder will reimburse any person intended to be indemnified pursuant to this Section 5.9(ii) for any legal or other expenses reasonably incurred by such person in connection with investigating or defending any such loss, claim, damage, liability or action as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 5.9(ii) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder (which consent shall not be unreasonably withheld), and provided that in no event shall any indemnity under this Section 5.9(ii) exceed the net proceeds from the offering received by such Holder.

(iii) Promptly after receipt by an indemnified party under this Section 5.9 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 5.9, deliver to the indemnifying party a written notice of the commencement thereof and the indemnifying party shall have the right to participate in and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one (1) separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such proceeding. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action, if prejudicial to its ability to defend such action, shall relieve such indemnifying party of liability to the indemnified party under this Section 5.9 to the extent of such prejudice, but the omission to so deliver written notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 5.9.

(iv) If the indemnification provided for in this Section 5.9 is held by a court of competent jurisdiction to be unavailable to an indemnified party with respect to any loss, liability, claim, damage or expense referred to herein, then the indemnifying party, in lieu of indemnifying such indemnified party hereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such loss, liability, claim, damage or expense in such proportion as is appropriate to reflect the relative fault of the indemnifying party on the one hand and the indemnified party on the other hand in connection with the statements or omissions that resulted in such loss, liability, claim, damage or expense, as well as any other relevant equitable considerations; provided, however, that (i) no contribution by any Holder, when combined with any amounts paid by such Holder pursuant to Section 5.9(ii), shall exceed the net proceeds from the offering received by such Holder and (ii) no person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation; and provided further that in no event shall a Holder's liability pursuant to this Section 5.9(iv), when combined with the amounts paid or payable by such Holder pursuant to Section 5.9(ii), exceed the proceeds from the offering received by such Holder (net of any expenses paid by such Holder). The relative fault of the indemnifying party and the indemnified party shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(v) The obligations of the Company and Holders under this Section 5.9 shall survive the completion of any offering of Registrable Securities in a registration statement under this Section 5 and otherwise.

5.10 Rule 144 Reporting. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rules and regulations of the Commission which may at any time permit a Holder to sell the Registrable Securities to the public without registration or pursuant to a registration on Form F-3, the Company agrees to

(i) make and keep public information available, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the IPO;

(ii) file with the Commission in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements); and

(iii) so long as a Holder owns any Registrable Securities, furnish to such Holder forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the first registration statement filed by the Company), the Securities Act and the Exchange Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form F-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested to avail any Holder of any rule or regulation of

the Commission that permits the selling of any such securities without registration or pursuant to such form.

5.11 Assignment of Registration Rights. The rights to cause the Company to register Registrable Securities pursuant to this Section 5 may be assigned (but only with all related obligations) by a Holder to a transferee or assignee of such securities that (a) is an Affiliate, subsidiary, parent, partner, limited partner, retired partner or shareholder of a Holder or (b) is a Holder's immediate family member (spouse or child) or trust for the benefit of an individual Holder; provided: (i) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned; (ii) such transferee or assignee agrees in writing to be bound by and subject to the terms and conditions of this Agreement, including, without limitation, the provisions of Section 5.13 below; and (iii) such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Securities Act.

5.12 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders holding at least two-thirds of the Registrable Securities then held by all Holders, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder (a) to include any of such securities in any registration filed under Section 5.2, Section 5.3 or Section 5.4 hereof, unless under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the amount of the Registrable Securities of the Holders that are included or (b) to demand registration of their securities.

5.13 "Market Stand-Off" Agreement. Each Holder agrees, if so required by the managing underwriter(s), that it will not during the period commencing on the date of the final prospectus relating to the Company's IPO and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days from the date of such final prospectus), (i) lend, charge, mortgage, offer, pledge, hypothecate, hedge, sell, make any short sale of, loan, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any Equity Securities of the Company owned immediately prior to the date of the final prospectus relating to the IPO (other than those included in such offering), or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such Equity Securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Equity Securities of the Company or such other securities, in cash or otherwise; provided, that (a) the foregoing provisions of this Section shall not apply to the sale of any securities of the Company to an underwriter pursuant to any underwriting agreement, and shall not be applicable to any Holder unless all directors, officers and all other holders of at least one percent (1%) of the outstanding share capital of the Company (calculated on an as-converted to Ordinary Share basis) must be bound by restrictions at least as restrictive as those applicable to any such Holder pursuant to this Section, (b) this Section shall not apply to an Holder to the extent that any other Person subject to substantially similar restrictions is released in whole or in part, and (c) the lockup

agreements shall permit an Holder to transfer its Equity Securities to its Affiliates so long as the transferees enter into the same lockup agreement. Each Holder agrees to execute and deliver to the underwriters a lock-up agreement containing substantially similar terms and conditions as those contained herein. In order to enforce the foregoing covenant, the Company may place restrictive legends on the certificates and impose stop-transfer instructions with respect to such Equity Securities of each Holder (and the shares or securities of every other Person subject to the foregoing restriction) until the end of such period. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Company stockholders that are subject to such agreements, based on the number of shares subject to such agreements.

5.14 Hong Kong Offering. If the Company shall be actively pursuing a listing on the Hong Kong Stock Exchange, the Company can restrict or otherwise prohibit the sale or transfer of any of its equity securities if, in the good faith determination of the Board, (a) such sale or transfer or the related payment or settlement therefor is proposed to or will occur during the 28-day period ending on the date immediately prior to the date of the Company's planned first submission of its first listing application form with the Hong Kong Stock Exchange (or such other relevant period as promulgated by the Hong Kong Stock Exchange or applicable Hong Kong securities regulators) or (b) such sale or transfer, after consulting the Company's legal counsel and sponsor(s) for the listing, may result in the delay of the Company's planned timetable for the planned listing.

(i) In the event of any share dividend, share split, recapitalization or other change affecting the Company's outstanding Ordinary Shares effected without receipt of consideration, then any new, substituted or additional securities distributed with respect to the Shares shall be immediately subject to the provisions of this Section 5.14, to the same extent the Shares are at such time covered by such provisions.

(ii) In order to enforce the limitations of thisSection 5.14, the Company may impose stop-transfer instructions with respect to the Shares until the end of the applicable stand-off period.

5.15 Termination of Registration Rights. No Holder shall be entitled to exercise any right provided for in this Section 5 (a) after five (5) years following the consummation of the QIPO; (b) as to any Holder, such earlier time at which all Registrable Securities held by such Holder (and any Affiliate of the Holder with whom such Holder must aggregate its sales under SEC Rule 144) can be sold in any three (3)-month period without registration in compliance with SEC Rule 144; or (c) upon a liquidation, winding up or dissolution of the Company or a Deemed Liquidation Event.

6. Information and Inspection Rights.

6.1 Delivery of Financial Statements. The Company shall deliver to each Rights Holder the following documents or reports:

(i) within [***] days after the end of each fiscal year of the Company, a consolidated income statement and statement of cash flows for the Group for such fiscal year and a consolidated balance sheet for the Group as of the end of the fiscal year, audited and

certified by a firm of independent certified public accountants and all prepared in English and in accordance with the Accounting Standards consistently applied throughout the period;

(ii) within [***]days after the end of each quarter of each fiscal year of the Company, unaudited statements of income and cash flows of the Group for such fiscal quarter on a consolidated basis, and an unaudited balance sheet for the Group as of the end of such fiscal quarter, all prepared in English and in accordance with the Accounting Standards consistently applied throughout the period (except for customary year-end adjustments and except for the absence of notes); and

(iii) an annual business and financial plan for the following fiscal year, including a comprehensive operating budget forecasting the Company's revenues, expenses and cash position, no less than [***]days prior to the beginning of such fiscal year, in reasonable detail on a monthly basis, broken down by different operating subsidiaries and associated companies.

6.2 Inspection Rights. The Company covenants and agrees that each Rights Holder shall have the right, to reasonably inspect the books and records of each Group Company at any time during regular working hours and in a manner so as not to interfere with the normal business operations of the Group Company on reasonable prior notice to such Group Company, *provided* that such Rights Holder shall bear the costs for its own representatives and that such inspection shall not be more frequent than once a year. Notwithstanding anything to the contrary herein, each Rights Holder may make reasonable requests for financial information that is reasonably necessary for such Rights Holder's or any of its Affiliate's applicable financial statements, including for any filings of financial statements under the Exchange Act, and the Company shall promptly respond to such requests.

7. Preemptive Right.

7.1 General. The Company hereby grants to each holder of Ordinary Shares issued or issuable upon conversion of the Preferred Shares (each, a "**Rights Holder**") the right of first refusal to purchase such Rights Holder's Pro Rata Share (as defined below) (and any oversubscription, as provided below), of all (or any part) of any New Securities (as defined below) that the Company may from time to time issue after the date of this Agreement (the "**Preemptive Right**").

7.2 Pro Rata Share. A Rights Holder's "**Pro Rata Share**" for purposes of the Preemptive Rights is the ratio of (a) the number of Ordinary Shares (including Preferred Shares on an as-converted basis) held by such Rights Holder, to (b) the total number of Ordinary Shares (including Preferred Shares on an as-converted basis) then outstanding immediately prior to the issuance of New Securities giving rise to the Preemptive Rights.

7.3 New Securities. For purposes hereof, "**New Securities**" shall mean any Equity Securities of the Company issued after the Closing (as defined in the Share Exchange Agreement), except for:

(i) the Ordinary Shares and/or options or warrants therefor issued to employees, officers, directors, contractors, advisors or consultants of the Group pursuant to the Company's employee share option plans ("**ESOP**") duly approved by the Board;

(ii) any Equity Securities of the Company issued in connection with any share split, share dividend, reclassification or other similar event;

(iii) any Ordinary Shares issued pursuant to bona fide transactions with commercial lenders or lessors in connection with loans, credit arrangements, equipment financings or similar transactions, each such transaction having been approved by the Board;

(iv) any Equity Securities of the Company issued pursuant to the acquisition of another corporation or entity by the Company by consolidation, merger, purchase of assets, or other reorganization in which the Company acquires, in a single transaction or series of related transactions, all or substantially all assets of such other corporation or entity, or fifty percent (50%) or more of the equity ownership or voting power of such other corporation or entity, in any case, duly approved by the Board;

(v) any Equity Securities of the Company issued pursuant to the Company's IPO;

(vi) any Ordinary Shares issued upon the conversion of the Preferred Shares; and

(vii) any Seed Preferred Shares issued pursuant to the Share Exchange Agreement.

7.4 Procedures. In the event that the Company proposes to undertake an issuance of New Securities (in a single transaction or a series of related transactions), it shall give to each Rights Holder written notice of its intention to issue New Securities (the "**Participation Notice**"), describing the amount and type of New Securities, the price and the general terms upon which the Company proposes to issue such New Securities. Each Rights Holder shall have fifteen (15) Business Days from the date of receipt of any such Participation Notice (the "**Notice Period**") to agree in writing to purchase up to such Rights Holder's Pro Rata Share of such New Securities for the price and upon the terms and conditions specified in the Participation Notice by giving written notice to the Company and stating therein the quantity of New Securities to be purchased (not to exceed such Rights Holder's Pro Rata Share). If any Rights Holder fails to so respond in writing within the Notice Period, then such Rights Holder shall forfeit the right hereunder to purchase its Pro Rata Share of such New Securities. Upon the expiration of the Notice Period, the purchaser(s) to which the Company proposes to issue New Securities may, within fifteen (15) Business Days after the expiration of the Notice Period, elect to purchase in aggregate all or any portion of the Available New Securities at the same or higher price and upon non-price terms not more favorable to the purchasers thereof than specified in the Participation Notice (for the purposes of this Section 7.4, the number of "**Available New Securities**" equals (a) the total number of New Securities that the Company intends to issue as described in the Participation Notice less (b) the number of New Securities that the Rights Holders elect to purchase pursuant to the foregoing). In the event that the purchaser(s) does not elect to purchase in aggregate all of the Available New Securities, immediately after fifteen (15) Business Days of the expiration of the Notice Period, the Company shall promptly notify each Rights Holder that elects to purchase or acquire all the shares available to it (each, a "**Fully Exercising Shareholder**") of the number of Remaining New Securities (for the purposes of this Section 7.4, the number of "**Remaining New Securities**" equals (x) the total number of New Securities that the Company intends to issue

as described in the Participation Notice less (y) the number of New Securities that the Rights Holders and the purchaser(s) elect to purchase pursuant to the foregoing). During the ten (10) day period commencing after the Company has given such notice, each Fully Exercising Shareholder may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the Remaining New Securities which is equal to the proportion that the Ordinary Shares issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Shares, by such Fully Exercising Shareholder bears to the Ordinary Shares issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Shares then held, by all Fully Exercising Shareholders who wish to purchase such Remaining New Securities. The closing of any sale pursuant to this Section 7.4 shall occur within one hundred and twenty (120) days of the expiration of the Participation Notice. In the event that the Company has not issued and sold such New Securities within such one hundred and twenty (120) days period, then the Company shall not thereafter issue or sell any New Securities without again first offering such New Securities to the Rights Holders pursuant to this Section 7.4.

8. Tag-Along Right. If [***HBP***] or any of its transferee, successors or permitted assigns (the "**Tagged Shareholder**") proposes to Transfer, whether in a single transaction or a series of related transactions, more than [***] of the Shares owned or held by it (such Shares proposed to be Transferred, the "**Tagged Shares"**) to any Person that is not an Affiliate of the Tagged Shareholder and a proposed purchaser for such Tagged Shares (the "**Proposed Purchaser**") has been identified, the Tagged Shareholder shall, before effecting any such proposed Transfer, deliver written notice of this proposal together with all relevant details of such proposal (including the number of Shares proposed to be Transferred, the proposed Transfer price and the identity of the Proposed Purchaser) (the "**Transfer Notice**") to Allogene and Allogene shall have a tag-along right as described as follows (the "**Tag-Along Right**"):

8.1 Tag-Along Election. Allogene may exercise the Tag-Along Right by delivering to the Tagged Shareholder written notice of such election (the "**Tag-Along Election Notice**") within [***] days after the date upon which Allogene receives the Transfer Notice. The exercise or non-exercise of the Tag-Along Right by Allogene in one or more occasions shall not affect Allogene's Tag-Along Right in respect of any subsequent Transfer of Shares by the Tagged Shareholder.

8.2 Procedure. Upon delivery of a Tag-Along Election Notice, Allogene shall have the right to sell up to the Tag-Along Number of Shares to the Proposed Purchaser on the same terms and conditions (including price per share and form of consideration) otherwise described in the Transfer Notice. At the closing of such purchase and sale of Shares as a result of the exercise of the Tag-Along Right, the Tagged Shareholder shall cause to be remitted to Allogene, that portion of the sale proceeds to which Allogene is entitled by reason of such exercise of Tag-Along Right in the same manner and at the same time as paid to the Tagged Shareholder. Unless otherwise agreed to by Allogene, the completion of any Transfer of Shares by Allogene in connection with the exercise of the Tag-Along Right by Allogene shall take place on the same date as the corresponding Transfer by the Tagged Shareholder, and to the extent any Transfer of Shares by Allogene is not completed on the same date as the Transfer by the Tagged Shareholder, the Transfer by the Tagged Shareholder shall not be consummated. Any proposed Transfer by the Tagged Shareholder after expiration of [***]

days following the date of the Transfer Notice, shall again require compliance by the Tagged Shareholders with the procedures described in this Section 8.

8.3 Tag-Along Number. As used in this Section 8, the "**Tag-Along Number**" shall be determined by multiplying (a) the total number of Shares held by Allogene and its Affiliates by (b) the percentage determined by dividing the aggregate number of Tagged Shares proposed to be Transferred by the Tagged Shareholder in one or more Transfers that are subject to the Tag-Along Right by the aggregate number of Shares then held by the Tagged Shareholder, provided, however, that if the Tagged Shareholder no longer be the single largest shareholder of the Company after taking into account the sale of Tagged Shared by Allogene, the Tag-Along Number shall be the higher of the (i) Tag-Along Number, or (ii) [***] of all Shares then held by Allogene and its Affiliates.

8.4 Terms of Sale. To the extent Allogene elects to exercise the Tag-Along Right under this Section 8, (a) in no event shall Allogene be held liable for any indemnification obligation jointly with the Tagged Shareholder or any other shareholder of the Company, (b) Allogene shall not be liable for any indemnification obligations in excess of its portion of the net cash proceeds received by Allogene in such transaction, (c) Allogene shall not be required to make or give any representations, warranties or covenants other than representations and warranties as to the title to its Shares, its ability to sell such Shares free and clear of any liens or encumbrances, the absence of any adverse claim with respect to such Shares, and its power, authority and legal right to enter into and consummate the proposed Transfer, and (d) Allogene shall not be obligated to enter into any non-competition or other similar post-closing covenants.

8.5 Transfer to Affiliates. If the Tagged Shareholder Transfers some or all of the Tagged Shares to any of its Affiliates, any subsequent Transfer of such Tagged Shares acquired from the Tagged Shareholder by such Affiliate shall be subject to Allogene's Tag-Along Right as described in this Section 8 as if such Tagged Shares were still held by the Tagged Shareholder.

8.6 Violation of Tag-Along Right. If a Tagged Shareholder or any of its Affiliates purports to sell any Tagged Share in contravention of Allogene's Tag-Along Right, Allogene shall be entitled to, in addition to such remedies as may be available by law, in equity or hereunder, require such Tagged Shareholder and its applicable Affiliate(s) to purchase from Allogene the number of Shares that Allogene would have been entitled to sell to the Proposed Purchaser had the terms of Sections 8.1 through 8.5 been fully complied with by such Tagged Shareholder and its applicable Affiliate(s). The sale will be made on the same terms as the terms of sale of Shares between such Tagged Shareholder and the Proposed Purchaser and subject to the same conditions as would have applied had the terms of Sections 8.1 through 8.5 been fully complied with by such Tagged Shareholder. In such case, the Tagged Shareholder and its applicable Affiliate(s) shall also reimburse Allogene for any and all reasonable and documented out-of-pocket fees and expenses, including reasonable legal fees and expenses, incurred pursuant to the exercise or the attempted exercise of Allogene's rights under this Section 8.

9. Additional Covenants.

9.1 Accounting Standards; Fiscal Year; Internal Controls. The Company shall cause the Group Companies to adopt and maintain December 31 as their fiscal year end and will maintain their books and records in accordance with sound business practices and implement and maintain an adequate system of procedures and controls with respect to finance, management, and accounting that meets international standards of good practice and is reasonably satisfactory to the Board to provide reasonable assurance that (i) transactions by it are executed in accordance with management's general or specific authorization, (ii) transactions by it are recorded as necessary to permit preparation of financial statements in conformity with the Accounting Standards and to maintain asset accountability, (iii) access to assets of it is permitted only in accordance with management's general or specific authorization, (iv) the recorded inventory of assets is compared with the existing tangible assets at reasonable intervals and appropriate action is taken with respect to any material differences, (v) segregating duties for cash deposits, cash reconciliation, cash payment, proper approval is established, and (vi) no personal assets or bank accounts of the employees, directors, officers are mingled with the corporate assets or corporate bank account, and no Group Company uses any personal bank accounts of any employees, directors, officers thereof during the operation of the business.

9.2 No Avoidance; Voting Trust. The Company will not, by any voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be performed hereunder by the Company, and the Company will at all times in good faith assist and take action as appropriate in the carrying out of all of the provisions of this Agreement. Each holder of Shares agrees that it shall not enter into any other agreements or arrangements of any kind with respect to the voting of any Shares or deposit any Shares in a voting trust or other similar arrangement.

9.3 Confidentiality.

(i) The terms and conditions of the Transaction Documents, including their existence, and any information obtained from the Company pursuant to the terms of the Transaction Documents or otherwise (collectively, the "**Confidential Information**") shall be considered confidential information and shall not be disclosed by any of the Parties to any other Person (including, without limitation, any portfolio company of [***HBP***] or any other [***HBP***] Party) unless such Confidential Information (a) is known or becomes known to the public in general (other than as a result of a breach of this Section 9.3(i) by such Party), (b) is or has been independently developed or conceived by the Shareholder without use of the Company's Confidential Information, or (c) is or has been made known or disclosed to the Party by a third party without a breach of any obligation of confidentiality such third party may have to the other Parties, and except that (x) each Party, as appropriate, may disclose any of the Confidential Information to its current or bona fide prospective investors, prospective permitted transferees, employees, investment bankers, lenders, accountants and attorneys, in each case only where such Persons are under commercially reasonable nondisclosure obligations; (y) the Shareholder may disclose any of the Confidential Information to its fund manager and the employees thereof so long as such Persons are under commercially reasonable nondisclosure obligations; and (z) if any Party is requested or becomes legally compelled (including without limitation, pursuant to the applicable securities laws) to disclose the existence or content of any of the Confidential Information in contravention of the provisions of this Section, such Party shall, to the extent permitted by applicable Law, promptly provide the other Parties with written notice of that

fact so that such other Parties may seek a protective order, confidential treatment or other appropriate remedy and in any event shall furnish only that portion of the information that is legally required and shall exercise reasonable efforts to obtain reliable assurance that confidential treatment will be accorded such information.

(ii) The provisions of this Section shall terminate and supersede the provisions of any separate nondisclosure agreement executed by any of the Parties hereto with respect to the transactions contemplated hereby, including without limitation, any term sheet, letter of intent, memorandum of understanding or other similar agreement entered into by the Company and the Shareholders in respect of the transactions contemplated hereby.

(iii) No announcement regarding the consummation of the transaction contemplated by this Agreement, the other Transaction Documents and any related documentation in a press release, conference, advertisement, announcement, professional or trade publication, mass marketing materials or otherwise to the general public may be made without the prior written consent of the Shareholders, except as may otherwise be required by applicable Laws or Governmental Order (including the rules and regulations of the New York Stock Exchange and the U.S. Securities and Exchange Commission), which shall require only the prior written consent of the Shareholders over the consents of such disclosure.

(iv) Use of Name. Without the prior written consent of the applicable Shareholder, none of the Parties shall use, publish, reproduce, or refer to the name of such Shareholder, its affiliates and/or controlling persons, trademark or logo in any discussion, documents or materials, including without limitation for marketing or other purposes.

9.4 Anti-Bribery Compliance. The Company agrees and covenants to make reasonable efforts to ensure that the Group: (i) complies with all applicable anti-bribery and anti-corruption laws and regulations, including, but not limited to, the U.S. Foreign Corrupt Practices Act and the UK Bribery Act and (ii) implements reasonable policies and procedures designed to prevent any Group Company, or any person acting on its or their behalf, from making any Prohibited Payment in connection with the activities or operations of any of the Group Companies. For purposes of this Section "**Prohibited Payment**" means (a) any offer, gift, payment, promise to pay or authorization of the payment of any money or anything of value, directly or indirectly, to or for the use or benefit of any Public Official (including to or for the use or benefit of any other person if a Group Company knows, or has reasonable grounds for believing, that the other person would use such offer, gift, payment, promise or authorization of payment for the benefit of any such Public Official), for the purpose of influencing any act or decision or omission of any Public Official in order to obtain, retain or direct business to, or to secure any improper benefit or advantage for, a Group Company or any other person, or (b) any conduct constituting a violation of applicable Law involving corruption or bribery; provided that any such offer, gift, payment, promise or authorization of payment shall not be considered a Prohibited Payment if it is lawful under applicable written laws and regulations, and "**Public Official**" means any executive, official, or employee of a Governmental Authority, political party or member of a political party, political candidate; executive, employee or officer of a public international organization; or director, officer or employee or agent of a wholly owned or partially state-owned or controlled enterprise.

9.5 Insurance. The Company shall obtain, within ninety (90) days of the date hereof, from financially sound and reputable insurers in the Company's reasonable judgment,

directors and officers liability insurance in an amount and on terms and conditions satisfactory to the Board, and will use commercially reasonable efforts to cause such insurance policies to be maintained until such time as the Board determines that such insurance should be discontinued.

9.6 Indemnification Matters. The Company hereby acknowledges that one (1) or more of Preferred Directors may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Shareholders and certain of their Affiliates (collectively, the "**Shareholder Indemnitors**"). The Company hereby agrees (i) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Preferred Director are primary and any obligation of the Shareholder Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Preferred Director are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by such Preferred Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Preferred Director to the extent legally permitted and as required by the Memorandum and Articles (or any agreement between the Company and such Preferred Director), without regard to any rights such Preferred Director may have against the Shareholder Indemnitors, and (iii) that it irrevocably waives, relinquishes and releases the Shareholder Indemnitors from any and all claims against the Shareholder Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Shareholder Indemnitors on behalf of any such Preferred Director with respect to any claim for which such Preferred Director has sought indemnification from the Company shall affect the foregoing and the Shareholder Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Preferred Director against the Company. The Preferred Directors and the Shareholder Indemnitors are intended third-party beneficiaries of this Section 9.6 and shall have the right, power and authority to enforce the provisions of this Section 9.6 as though they were a party to this Agreement.

9.7 Employee Agreements. The Company will cause (i) each Person now or hereafter employed by it or by any of its subsidiaries (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement; and (ii) subject to the applicable Law, such Person to enter into a noncompetition and nonsolicitation agreement, in each case substantially in the form approved by the Board. In addition, the Company shall not amend, modify, terminate, waive, or otherwise materially alter, in whole or in part, any of the above-referenced agreements or any restricted stock agreement between the Company and any such Person, without the consent of the Board.

9.8 Employee Stock. Unless otherwise approved by the Board, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four (4) year period, with the first twenty-five percent (25%) of such shares vesting following twelve (12) months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following thirty-six (36) months, and (ii) a market stand-off provision substantially similar to that in Section 5.13. Without the prior approval by the Board, the Company shall not amend, modify, terminate,

waive or otherwise alter, in whole or in part, any stock purchase, stock restriction or option agreement with any existing employee or service provider if such amendment would cause it to be inconsistent with this Section 9.8. In addition, unless otherwise approved by the Board, the Company shall retain (and not waive) a "right of first refusal" on employee transfers until the Company's IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

9.9 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board as in effect immediately before such transaction, whether such obligations are contained in the Memorandum and Articles, or elsewhere, as the case may be.

10. Miscellaneous.

10.1 Termination. This Agreement shall terminate upon mutual consent of the Parties hereto. The provisions of Sections 2, 3, 4, 6, 7, 8 and 9 (except for 6.2, 9.3, 9.6 and 9.9) shall terminate on the earliest of the consummation of a QIPO or a Deemed Liquidation Event. If this Agreement terminates, the Parties shall be released from their obligations under this Agreement, except in respect of any obligation stated, explicitly or otherwise, to continue to exist after the termination of this Agreement. This Agreement shall terminate with respect to any shareholder of the Company when such shareholder no longer holds any Shares. If any Party breaches this Agreement before the termination of this Agreement, it shall not be released from its obligations arising from such breach on termination.

10.2 Further Assurances. Upon the terms and subject to the conditions herein, each of the Parties hereto agrees to use its reasonable best efforts to take or cause to be taken all action, to do or cause to be done, to execute such further instruments, and to assist and cooperate with the other Parties hereto in doing, all things necessary, proper or advisable under applicable Laws or otherwise to consummate and make effective, in the most expeditious manner practicable, the transactions contemplated by this Agreement.

10.3 Assignments and Transfers; No Third Party Beneficiaries. Each Shareholder may transfer or assign, in whole or from time to time in part, to one or more persons its rights or delegate its obligations hereunder in connection with the transfer of Shares by such Shareholder to such person, provided that (i) the Shareholder agrees in writing with the assignee to assign such rights and obligations and a copy of such agreement is furnished to the Company within a reasonable time after such assignment; (ii) the Company is, within a reasonable time after such assignment, furnished with written notice of the name and address of such transferee or assignee; and (iii) at or before the time the Company receives the written notice contemplated by clause (ii) of this sentence the assignee agrees in writing with the Company to be bound by all of the provisions contained herein. Except as otherwise provided herein, this Agreement and the rights and obligations of the Parties hereunder shall inure to the benefit of, and be binding upon, their respective permitted successors, assigns and legal representatives, but shall not otherwise be for the benefit of any Third Party. In the event the rights of any Shareholder hereunder (including, without limitation, registration rights) are assigned (together with the related obligations) to a

permitted Third Party in accordance with this Section 10.3, such permitted transferee shall execute and deliver to the Company a deed of adherence or joinder becoming a party hereto as a "Shareholder" subject to the terms and conditions hereof (if not already so bound). This Agreement and the rights and obligations of each other Party hereunder shall not otherwise be assigned without the mutual written consent of the other Parties except as expressly provided herein.

10.4 Governing Law. This Agreement and all actions arising out of or in connection with this Agreement shall be governed by and construed in accordance with the Laws of the State of New York, without regard to the conflicts of Law provisions thereof or of any other jurisdiction which would result in the application of the Laws of any other jurisdiction.

10.5 Dispute Resolution.

(i) ***Disputes***. Subject to Section 10.5(iii), upon the written request of any Party to any other Party, any claim, dispute, or controversy as to the breach, enforcement, interpretation or validity of this Agreement (a "**Dispute**") will be referred to the chief executive officers of the disputing Parties (or their designee with decision-making authority of at least senior vice president level) for attempted resolution. In the event such executives or their designees are unable to resolve such Dispute within sixty (60) days after the initial written request, then, upon the written demand of any disputing Party, the Dispute shall be subject to arbitration, as provided in Section 10.5(ii), except as expressly set forth in Section 10.5(iii).

(ii) ***Arbitration***.

(a) Claims. Subject to Section 10.5(iii) below, any Dispute that is not resolved under Section 10.5(i) within thirty (30) days after a disputing Party's initial written request for resolution, shall be resolved by final and binding arbitration before a panel of three neutral experts with relevant industry experience. The arbitration proceeding shall be administered by the International Court of Arbitration of the International Chamber of Commerce (the "**ICC**") in accordance with its then existing arbitration rules or procedures regarding commercial or business disputes, and the panel of arbitrators shall be selected in accordance with such rules. The arbitration and all associated discovery proceedings and communications shall be conducted in English, and the arbitration shall be held in New York. Except to the extent necessary to confirm an award or as may be required by law, neither a Party nor an arbitrator may disclose the existence, content, or results of arbitration without the prior written consent of the disputing Parties.

(b) Arbitrators' Award. The arbitrators shall, within fifteen (15) days after the conclusion of the arbitration hearing, issue a written award and statement of decision describing the essential findings and conclusions on which the award is based, including the calculation of any damages awarded. The decision or award rendered by the arbitrators shall be final and non-appealable, and judgment may be entered upon it in any court of competent jurisdiction. Any disputing Party may apply for interim injunctive relief with

the arbitrators until the arbitration award is rendered or the controversy is otherwise resolved. The arbitrators shall be authorized to award compensatory damages, but shall not be authorized (i) to award non-economic damages, (ii) to award punitive damages or any other damages expressly excluded under this Agreement, or (iii) to reform, modify or materially change this Agreement or any other agreements contemplated hereunder; provided, however, that the damage limitations described in subsections (i) and (ii) of this sentence will not apply if such damages are statutorily imposed.

(c) Costs. Each Party shall bear its own attorneys' fees, costs, and disbursements arising out of the arbitration, and shall pay an equal share of the fees and costs of the arbitrators; provided, however, that the arbitrators shall be authorized to determine whether a Party is the prevailing party, and if so, to award to that prevailing party reimbursement for any or all of its reasonable attorneys' fees, costs and disbursements (including, for example, expert witness fees and expenses, photocopy charges, travel expenses, etc.), and/or the fees and costs of the ICC and the arbitrators.

(iii) **Court Actions**. Nothing contained in this Agreement shall deny any Party the right to seek, upon good cause, injunctive or other equitable relief from a court of competent jurisdiction in the context of an emergency or prospective irreparable harm, and such an action may be filed and maintained notwithstanding any ongoing dispute resolution discussions or arbitration proceedings.

10.6 Notices. Any notice required or permitted pursuant to this Agreement shall be given in writing and shall be given either personally or by sending it by next-day or second-day courier service, fax, electronic mail or similar means to the address of the relevant Party as shown on Schedule A (or at such other address as such Party may designate by fifteen (15) days' advance written notice to the other Parties to this Agreement given in accordance with this Section). Where a notice is sent by next-day or second-day courier service, service of the notice shall be deemed to be effected by properly addressing, pre-paying and sending by next-day or second-day service through an internationally-recognized courier a letter containing the notice, with a written confirmation of delivery, and to have been effected at the earlier of (i) delivery (or when delivery is refused) and (ii) expiration of two (2) Business Days after the letter containing the same is sent as aforesaid. Where a notice is sent by electronic mail, service of the notice shall be deemed to be effected by properly addressing, and sending such notice through a transmitting organization, with a written confirmation of delivery, and to have been effected on the day the same is sent as aforesaid, if such day is a Business Day and if sent during normal business hours of the recipient, otherwise the next Business Day. Notwithstanding the foregoing, to the extent a "with a copy to" address is designated, notice must also be given to such address in the manner above for such notice, request, consent or other communication hereunder to be effective.

10.7 Rights Cumulative; Specific Performance. Each and all of the various rights, powers and remedies of a Party hereto will be considered to be cumulative with and in addition to any other rights, powers and remedies which such Party may have at Law or in equity in the event of the breach of any of the terms of this Agreement. The exercise or partial exercise of any right, power or remedy will neither constitute the exclusive election thereof nor the waiver of any other right, power or remedy available to such Party. Without limiting

the foregoing, the Parties hereto acknowledge and agree irreparable harm may occur for which money damages would not be an adequate remedy in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the Parties shall be entitled to injunctive relief to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement.

10.8 Severability. In case any provision of the Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby. If, however, any provision of this Agreement shall be invalid, illegal, or unenforceable under any such applicable Law in any jurisdiction, it shall, as to such jurisdiction, be deemed modified to conform to the minimum requirements of such Law, or, if for any reason it is not deemed so modified, it shall be invalid, illegal, or unenforceable only to the extent of such invalidity, illegality, or limitation on enforceability without affecting the remaining provisions of this Agreement, or the validity, legality, or enforceability of such provision in any other jurisdiction.

10.9 Amendments and Waivers. Any provision in this Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only by the written consent of (i) the Company; (ii) [***HBP***]; and (iii) Allogene. Notwithstanding the foregoing, any Party hereunder may waive any of its rights hereunder without obtaining the consent of any other Party. Any amendment or waiver effected in accordance with this Section shall be binding upon all the Parties hereto.

10.10 No Waiver. Failure to insist upon strict compliance with any of the terms, covenants, or conditions hereof will not be deemed a waiver of such term, covenant, or condition, nor will any waiver or relinquishment of, or failure to insist upon strict compliance with, any right, power or remedy hereunder at any one or more times be deemed a waiver or relinquishment of such right, power or remedy at any other time or times.

10.11 Delays or Omissions. No delay or omission to exercise any right, power or remedy accruing to any Party under this Agreement, upon any breach or default of any other Party under this Agreement, shall impair any such right, power or remedy of such non-breaching or non-defaulting Party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any Party of any breach or default under this Agreement, or any waiver on the part of any Party of any provisions or conditions of this Agreement, must be in writing and shall be effective only to the extent specifically set forth in such writing.

10.12 No Presumption. The Parties acknowledge that any applicable Law that would require interpretation of any claimed ambiguities in this Agreement against the Party that drafted it has no application and is expressly waived. If any claim is made by a Party relating to any conflict, omission or ambiguity in the provisions of this Agreement, no presumption or burden of proof or persuasion will be implied because this Agreement was prepared by or at the request of any Party or its counsel.

10.13 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. E-mailed copies of signatures shall be deemed to be originals for purposes of the effectiveness of this Agreement.

10.14 Entire Agreement. This Agreement (including the Exhibits hereto) constitutes the full and entire understanding and agreement among the Parties with regard to the subjects hereof, and supersedes all other agreements between or among any of the Parties with respect to the subject matter hereof.

10.15 Agreement Controlling. In the event of any conflict or inconsistency between any of the terms of this Agreement and any of the terms of the Memorandum and Articles or any of the Charter Documents for any of the Group Companies other than the Company, or in the event of any dispute related to any such Charter Document, the terms of this Agreement shall prevail in all respects, the Parties shall give full effect to and act in accordance with the provisions of this Agreement over the provisions of the Charter Documents, and the Parties hereto shall exercise all voting and other rights and powers (including to procure any required alteration to such Charter Documents to resolve such conflict or inconsistency) to make the provisions of this Agreement effective, and not to take any actions that impair any provisions in this Agreement.

10.16 Aggregation of Shares. All Shares held or acquired by any Affiliates shall be aggregated together for the purpose of determining the availability of any rights of any Shareholder, under this Agreement.

10.17 Use of English Language. This Agreement has been executed and delivered in the English language. Any translation of this Agreement into another language shall have no interpretive effect. All documents or notices to be delivered pursuant to or in connection with this Agreement shall be in the English language or, if any such document or notice is not in the English language, accompanied by an English translation thereof, and the English language version of any such document or notice shall control for purposes thereof.

10.18 Effective Date. This Agreement shall only take effect and become binding on and enforceable against the Parties subject to and upon the Closing (as defined in the Share Exchange Agreement) (the "**Effective Date**").

[*The remainder of this page has been intentionally left blank*.]

IN WITNESS WHEREOF, the parties hereto have caused their respective duly authorized representatives to execute this Agreement on the date and year first above written.

COMPANY:

Allogene Overland Biopharm (CY) Limited

By: /s/ Ed Zhang
Name: Ed Zhang
Title: CEO

IN WITNESS WHEREOF, the parties hereto have caused their respective duly authorized representatives to execute this Agreement on the date and year first above written.

SHAREHOLDER:

Allogene Therapeutics, Inc.

By: /s/ David Chang
Name: David Chang
Title: CEO and President

IN WITNESS WHEREOF, the parties hereto have caused their respective duly authorized representatives to execute this Agreement on the date and year first above written.

SHAREHOLDER:

HH BioPharma Holdings Ltd.

By: /s/ Kong Li Yung
Name: Kong Li Yung
Title: Director

SCHEDULE A

ADDRESS FOR NOTICES

If to the Company:

Address: c/o Walkers Corporate Limited
Cayman Corporate Centre
27 Hospital Road
George Town, Grand Cayman
KY1-9008, Cayman Islands
Attention: Allogene Overland Biopharm (CY) Limited – The Corporate Administrator

If to Allogene:

Allogene Therapeutics, Inc.	Address: 210 East Grand Avenue, South San Francisco, CA 94080 Attention: General Counsel Email: notice@allogene.com with a copy to: Goodwin Procter LLP Address: The New York Times Building, 620 8th Avenue, New York, NY 10018 Attention: Wendy Pan Email: [***]

If to [***HBP***]:

HH BioPharma Holdings Ltd.	Address: 89 Nexus Way, Camana Bay, P.O. Box 31106, Grand Cayman KY1-1205, Cayman Islands Attention: Legal Department Email: [***]

CERTAIN INFORMATION CONTAINED IN THIS EXHIBIT, MARKED BY [***], HAS BEEN EXCLUDED BECAUSE THE REGISTRANT HAS DETERMINED THE INFORMATION IS BOTH NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

FIRST AMENDMENT TO EXCLUSIVE LICENSE AGREEMENT

This First Amendment to Exclusive License Agreement ("***Amendment***"), effective as of May 24, 2024, (the "***Amendment Effective Date***") amends the Exclusive License Agreement dated December 14, 2020 (the "***License Agreement***") between Allogene Therapeutics, Inc. ("***Allogene***") and Allogene Overland BioPharm (PRC) Co., Limited ("***AOB PRC***" or "***Licensee***") (collectively the "***Parties***" and each a "***Party***"). Capitalized terms not defined herein shall have the meanings ascribed to them in the License Agreement.

WHEREAS, Allogene Overland BioPharm (CY) Limited ("***AOB CY***") was formed by Allogene and Overland Pharmaceuticals (CY) Inc. ("***Overland***") to enter into the License Agreement;

WHEREAS, Allogene and AOB CY entered into the License Agreement;

WHEREAS, AOB CY assigned all its rights, licenses, options and obligations under the License Agreement to Allogene Overland BioPharma (HK) Limited, ("***AOB HK***");

WHEREAS, AOB HK assigned all of its rights, licenses, options and obligations under the License Agreement to AOB PRC;

WHEREAS, Overland and Allogene have agreed to combine AOB CY with Overland's cell therapy business (the "***Transaction***" and such surviving, combined entity the "***Company***");

WHEREAS, as partial consideration for the Transaction, the Parties have agreed to modify certain provisions of the License Agreement in accordance with the terms and conditions of this Amendment.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Allogene and Licensee hereby agree as follows:

AGREEMENT

1. Article 1 (**Definitions**) of the License Agreement is amended by inserting the following new defined terms:

"**Company**" means the Allogene Overland Biopharm (CY) Limited, an exempted company incorporated in the Cayman Islands with limited liability."

"**Fully-diluted basis**" of the Company means to include all outstanding shares and other outstanding equity securities (including options, warrants, convertible securities, and other rights to acquire the share capital of the Company), assuming all preferred shares of the Company are converted into ordinary shares at the then applicable conversion ratio as set forth in the Company's then-effective memorandum and articles or equivalent."

"**Minimum Shares Triggering Event**" shall have the meaning provided in Section 12.2(g).

"**Modified Milestone Terms**" shall have the meaning provided in Section 8.2.

"**Modified Royalty Terms**" shall have the meaning provided in Section 8.3.

2. Schedule 1.74 (**Known Third Party Obligations**) is hereby amended by deleting Schedule 1.74 (**Known Third Party Obligations**) in its entirety and replacing it with Schedule 1.74 (**Known Third Party Obligations**) attached to this Amendment.

3. Section 2.10 (**Non-Compete**) of the License Agreement is hereby amended by adding the following to the end of Section 2.10 (**Non-Compete**):

"Notwithstanding the foregoing, Allogene acknowledges and agrees Licensee and its Affiliates (for the avoidance of doubt, including Company) shall be permitted to, directly or indirectly (including in collaboration with one or more Third Parties): (a) conduct contract development and manufacturing (CDMO) business on behalf of Third Parties, *provided* that Licensee shall not use or disclose any Allogene Invention, Allogene Technology, Allogene Confidential Information, Joint Invention or the Allogene Platform in connection with such Third Party CDMO business, and (b) research, Develop, Commercialize, Manufacture and sell [***] or otherwise exploit [***] outside of Products, *provided* that any [***] researched, Developed, Commercialized, Manufactured or otherwise exploited by Licensee and its Affiliates shall not [***]; provided further that Licensee and its Affiliates are permitted to exploit [***]. For clarity, in the event the Agreement is terminated with respect to any Product, [***] shall no longer be subject to the terms of this Section 2.10 (Non-Compete), and Licensee and its Affiliates shall have the right to freely exploit [***]."

4. Section 5.3(b) (**Commercial Manufacture and Supply in the Licensee Territory**) of the License Agreement is hereby amended by deleting Section 5.3(b) (**Commercial Manufacture and Supply in the Licensee Territory**) in its entirety and replacing it with the following:

"On a Product-by-Product basis, after [***], the Parties will jointly prepare and agree on a Manufacturing technology transfer plan. Allogene will provide technical transfer assistance pursuant to such plan. Company shall pay [***] of the costs of the technology transfer ("***Tech Transfer Cost***") incurred during the period commencing from the Amendment Commencement Date and ending upon [***], including material costs and FTE costs of Allogene, and Allogene shall [***] of the Tech Transfer Cost, in each case, in accordance with such technology transfer plan. From and after [***], Company shall pay [***] of the Tech Transfer Cost incurred thereafter in accordance with such technology transfer plan. The Parties acknowledge and agree that Licensee may request, and Allogene will perform, technology transfer in to an Affiliate of Licensee; provided that Allogene will not be obligated to perform technology transfer into a Third Party not wholly controlled, directly or indirectly, by Company. For purposes of this Section 5.3(b), [***].

5. Section 5.3 (**Commercial Manufacture and Supply in the Licensee Territory**) of the License Agreement is hereby amended by adding the following Section 5.3(d) (**Commercial Manufacture and Supply in the Licensee Territory**) to the end of Section 5.3:

"In the event of Licensee's failure to initiate Manufacturing Technology Transfer with respect to a Product on or before [***], Allogene shall be entitled to terminate this Agreement in its entirety or with respect to the applicable Product immediately upon written notice to Licensee, and the provisions of Section 12.3 shall apply to the extent applicable."

6. Article 8 (**Payments**) of the License Agreement is amended by inserting the following immediately after Section 8.2 (**Development and Regulatory Milestone Payments**):

"Notwithstanding the foregoing, Schedule 8.2A to this Agreement (as amended) setting forth the modified royalty rates (the "**Modified Milestone Terms**") shall apply to the Product that Licensee elects to continue pursuant to Section 12.2(g)."

Schedule 8.2A attached to this Amendment is hereby incorporated into the License Agreement by reference.

7. Section 8.3 (**Royalties**) of the License Agreement is hereby amended by deleting Section 8.3 (**Royalties**) in its entirety and replacing it with the following:

"**Royalties**. On a Product-by-Product basis during the applicable Royalty Term, Licensee shall pay a flat [***] royalty to Allogene of [***] on Aggregate Annual Net Sales of the Products in the Licensee Territory in each Calendar Quarter."

8. Article 8 (**Payments**) of the License Agreement is amended by inserting the following immediately after Section 8.3 (**Royalties**):

"Notwithstanding the foregoing, Schedule 8.3A to this Agreement (as amended) setting forth the modified royalty rates (the "**Modified Royalty Terms**") shall apply to the Product that Licensee elects to continue pursuant to Section 12.2(g)."

Schedule 8.3A attached to this Amendment is hereby incorporated into the License Agreement by reference.

9. Section 8.5 (**Third Party Payments**) of the License Agreement is hereby amended by deleting Section 8.5 (Third Party Payments) in its entirety and replacing it with the following:

"**Third Party Payments**. Licensee shall be responsible for all Known Third-Party Obligations existing as of the Effective Date that are set forth in Schedule 1.74 (as amended), and shall make such payments directly to the applicable Third Parties to satisfy such Known Third-Party Obligations."

10. Section 11.1 (**Ownership**) of the License Agreement is hereby amended by adding the following to the end of Section 11.1(e) (**Licensee's Affiliates, Sublicensees and Subcontractors**) as Section 11.1(f) (**Ownership of Other IP**):

"**Ownership of Other IP**. For the avoidance of doubt, any inventions and/or discoveries, including processes, manufacture, composition of matter, Information, methods, assays, designs, protocols, and formulas, and improvements or modifications thereof, patentable or otherwise, that are generated, developed, conceived or reduced to practice (constructively or actually) by or on behalf of Licensee, the Company or any of their respective Affiliates or (sub)licensees or subcontractors not relating to any of the Compounds and Products or Allogene Platform nor the performance of any activities under this Agreement, including all rights, title and interest in and to the intellectual property rights therein and thereto, together with all Know-How, Patents and other intellectual property rights arising therefrom, shall be solely owned by Licensee (the "**Other Inventions**"). For clarity, the Other Inventions shall not include any Platform Inventions, Allogene Inventions, Licensee Inventions or Joint Inventions."

11. Section 12.2 (**Termination**) is hereby amended by adding the following immediately after Section 12.2(e) (**Dispute**) as Section 12.2(f) (**Allogene's Termination Rights Relating to the Share Exchange Agreement**):

"**Allogene's Termination Rights Relating to the Share Exchange Agreement.** Without limiting the foregoing, Allogene shall be entitled to terminate this Agreement (as amended) in its entirety or with respect to any Products upon written notice to Licensee if (i) a [***] (as defined in the Share Exchange Agreement) under the Share Exchange Agreement occurs, or (ii) there is any material inaccuracy in any representation or warranty made by Overland Pharmaceuticals (CY) Inc. (or its successors or permitted assigns) in the Share Exchange Agreement, or any material breach of any covenant made by Overland Pharmaceuticals (CY) Inc. (or its successors or permitted assigns) in the Share Exchange Agreement. For the avoidance of doubt, in the case of the foregoing subclause (i) or (ii), the provisions of Section 12.3 shall apply to the extent applicable. As used herein, "**Share Exchange Agreement**" means the Share Exchange Agreement dated May 24, 2024 by and among Allogene, Overland Pharmaceuticals (CY) Inc. and the Company, as may be amended and/or restated from time to time."

12. Section 12.2 (**Termination**) is hereby amended by adding the following to immediately after Section 12.2(f) (**Allogene's Termination Rights Relating to the Share Exchange Agreement**) as Section 12.2(g) (**Automatic Termination Relating to Allogene Minimum Shares**):

"**Automatic Termination Relating to Allogene Minimum Shares.** Without limiting the foregoing, if all of the shares held by Allogene and its Affiliates in the Company constitute [***] or less of the total shares of the Company (or its successor) on a fully-diluted basis and Allogene or its Affiliates hold [***] of Ordinary Shares issued or issuable upon the conversion of the Preferred Shares beneficially owned by Allogene or its Affiliates as of the date of this Agreement (the "**Minimum Shares Triggering Event**"), this Agreement shall terminate automatically, except that Licensee may, by giving Allogene written notice no later than [***] days after the first occurrence of the Minimum Shares Triggering Event, elect to continue this Agreement on the Modified Milestone Terms and the Modified Royalty Terms with respect to any Product for which Licensee and Allogene have agreed upon a Manufacturing technology transfer plan through the unanimous approval of the JSC, including the approval of Allogene's representative(s) on the JSC. For clarity, if the JSC cannot reach an agreement on such Manufacturing technology transfer plan, such disagreement shall be referred to the Executive Officers of both Parties for resolution pursuant to Section 7.1(b)(i), but if the Executive Officers cannot resolve such matter pursuant to Section 7.1(b)(ii), neither Licensee nor Allogene shall have the right to make the final decision with respect to such Manufacturing technology transfer plan."

13. **Licensee Additional Representation**. Licensee represents and warrants to Allogene that, as of the Amendment Effective Date, Licensee has performed and complied with its obligations and covenants under the License Agreement and did not commit any breach of any provision of the License Agreement, either by itself or via any of its Affiliates.

14. **Definitions; Dispute Resolution; Miscellaneous**. The terms and conditions of Article 1, Article 14 and Article 15 (excluding Section 15.9) of the License Agreement are incorporated hereby by reference *mutatis mutandis*.

15. **Ratification of License Agreement; No Implied Amendments**. Except as specifically modified or amended hereby, all other terms and conditions of the License Agreement shall remain unchanged and in full force and effect.

{Signature page follows}

IN WITNESS WHEREOF, the Parties hereto have duly executed this Amendment as of the Amendment Effective Date.

ALLOGENE THERAPEUTICS, INC.

By: /s/ David Chang

Name: David Chang

Title: CEO and President

ALLOGENE OVERLAND BIOPHARM (PRC) CO., LIMITED

By: /s/ Ed Zhang

Name: Ed Zhang

Title: Director

Schedule 1.74

Known Third Party Obligations

[***]

Schedule 8.2A

Development, Regulatory and Sales Milestone Payments

8.2A Development, Regulatory and Sales Milestone Payments. With respect to each milestone event set forth in the table below, within [***] days following the first achievement, whether by Licensee or any of Licensee's Affiliates or Sublicensees, of the corresponding milestone event with respect to any Product, Licensee shall notify Allogene of the first such achievement, and Licensee shall pay to Allogene the corresponding non-refundable, non-creditable, one-time milestone payment within [***] days after such achievement:

BCMA Product:

Product Milestone Event	**Milestone Payment (in U.S. Dollars)**
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

CD70 Product:

Product Milestone Event	**Milestone Payment (in U.S. Dollars)**
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

FLT3 Product:

Product Milestone Event	Milestone Payment (in U.S. Dollars)
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

DLL3 Product:

Product Milestone Event	Milestone Payment (in U.S. Dollars)
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

Schedule 8.3A

Royalties

8.3A Royalties. On a Product-by-Product basis during the applicable Royalty Term, Licensee shall pay tiered royalties to Allogene on incremental Aggregate Annual Net Sales of the Products in the Licensee Territory in each Calendar Quarter at the applicable rate(s) set forth below:

Increments of Aggregate Annual Net Sales of the Products	**Royalty Rate**
That portion of Aggregate Annual Net Sales that is less than or equal to [***]	[***]
That portion of Aggregate Annual Net Sales that is greater than [***] and less than or equal to [***]	[***]
That portion of Aggregate Annual Net Sales that is greater than [***] and less than or equal to [***]	[***]
That portion of Aggregate Annual Net Sales that is greater than [***]	[***]

CERTAIN INFORMATION CONTAINED IN THIS EXHIBIT, MARKED BY [***], HAS BEEN EXCLUDED BECAUSE THE REGISTRANT HAS DETERMINED THE INFORMATION IS BOTH NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDMENT AND SETTLEMENT AGREEMENT

THIS AMENDMENT AND SETTLEMENT AGREEMENT (this "***Amendment***") is made and entered into by and between **Les Laboratoires Servier**, a *société par actions simplifiée* incorporated under the laws of France having a principal place of business at 50 rue Carnot, 92150 Suresnes, France ("***LLS***") and **Institut de Recherches Internationales Servier**, a *société à responsabilité limitée* incorporated under the laws of France having its principal place of business at 22 Route 128, 91190 Gif-sur-Yvette, France ("***IRIS***") (LLS and IRIS being together referred to as "***Servier***"), and **Allogene Therapeutics, Inc.**, a Delaware corporation having its principal place of business at 210 East Grand Avenue, South San Francisco, CA 94080, USA (" ***Allogene***") with effective date as of April 9, 2024 (the "***Amendment Date***"). Each of Servier and Allogene are referred to herein as a "Party" and collectively as the "Parties".

RECITALS

WHEREAS, Servier and Allogene are Parties to that certain Exclusive License and Collaboration Agreement dated October 30, 2015, as amended by amendment agreement dated as of April 6, 2018, and then by the letter agreement between Allogene and Servier dated July 25, 2019 (the "***ELA***"). The ELA was originally entered into between Servier and Pfizer, Inc. ("***Pfizer***") and was assigned by Pfizer to Allogene by agreement effective April 6, 2018;

WHEREAS, the Parties attempted to develop products targeting the B lymphocyte antigen Cluster of Differentiation 19 and products targeting the epidermal growth factor receptor VIII inter alia through exploitation of the so-called allogeneic CAR T technology the intellectual property rights to which the Parties had in-licensed from Cellectis S.A. ("***Cellectis***") and Pfizer for specific targets on the basis of individual bilateral agreements between each Party and Cellectis or Pfizer;

WHEREAS, Servier entered into a first license development and commercialization agreement concerning CD19 Products with Cellectis on February 7, 2014, as amended thereafter in 2015, 2016 and 2017. Such first agreement was fully amended and restated on March 6, 2019, following and in light of the execution of the ELA, and amended on March 4, 2020 (the "***Servier/Cellectis Agreement***"), whereby Servier was granted under the Servier/Cellectis Agreement an exclusive worldwide license over certain CD19 Products;

WHEREAS, certain disputes have arisen between Servier and Allogene in relation to the ELA, and Servier and Allogene have decided to settle all existing disputes between them, and in furtherance of such settlement, to amend the ELA by, among other things, expanding the geographical scope of Allogene's rights; and

NOW, THEREFORE, in consideration of the mutual agreements and covenants hereinafter set forth, the Parties, intending to be legally bound, hereby agree as follows:

1. Defined Terms. All capitalized terms that are not otherwise defined in this Amendment shall have the meaning given to such terms in the ELA.

2 . Continuation of ELA. The Parties agree that the ELA, as amended by this Amendment, shall be and remain in force and effect in accordance with its terms as of and after the Amendment Date, including, without limitation Sections 2.1.1 and 16.2.7 of the ELA.

3 . CD19 Products. The Parties confirm and agree that as of the Amendment Date the "CD19 Products" as defined in the ELA include those products referred to as "ALLO 501", cemacabtagene ansegedleucel (cema-cel, previously "ALLO 501.A") and "UCART-19v1".

4. Amendment. The following provisions of the ELA shall be amended as follows:

(a) The following new defined terms are added to the end of ARTICLE 1. DEFINITIONS:

"***Extended Territory***" means the European Union and the United Kingdom.

"***Optional Extended Territory***" means China (including Hong Kong) and Japan.

(b) The ELA shall no longer be referred to as "Exclusive License and Collaboration Agreement", but as "Exclusive License Agreement". Therefore, the title page and first header of the ELA shall be amended accordingly. The Section 1.3 definition of "***Agreement***" is amended and replaced in its entirety as follows:

"***Agreement***" means this Exclusive License Agreement together with the recitals and all exhibits, schedules and attachments hereto.

(c) The Section 1.10 definition of "***CD19 Product***" is amended and replaced in its entirety as follows and **Exhibit 1.10** attached to the ELA is replaced in its entirety by the new **Exhibit 1.10** attached to this Amendment:

"***CD19 Product***" means any human allogeneic anti-tumor adoptive CAR T-cell engineered to express a single chain CAR directed against the CD19 Target using Cellectis intellectual property and gene edited exclusively using TAL nucleases, and shall include as of the Effective Date and as of the Amendment Date the CD19 Products set forth in Exhibit 1.10.

(d) The Section 1.17 definition of "***Collaboration Target***" is amended and replaced in its entirety as follows:

"***Collaboration Target***" means CD19.

(e) The Section 1.36 definition of "***European Union***" or "***EU***" is amended and replaced in its entirety as follows:

"***European Union***" or "***EU***" means all member states of the European Union as of the Amendment Date; if a member state leaves the EU (or its successor) after the Amendment Date, it shall remain a EU member state for purposes of the Agreement; if a state becomes a member state of the EU (or its successor) after the Amendment Date, it shall be a EU member state for purposes of the Agreement as of its accession.

(f) The Section 1.86 definition of "***Pfizer Territory***" is amended and replaced in its entirety as follows:

"***Allogene Territory***" means (a) the United States of America, and its territories and possessions, (b) the Extended Territory, and (c) to the extent added in accordance with Section 2.1.3, the Optional Extended Territory, in each case for such Servier Licensed Product, or (d) if and to the extent the license conversion provisions under Sections 2.6.4.1 or 2.6.4.3 in this Agreement apply, all countries worldwide.

(g) The Section 1.106 definition of "***Servier Licensed Products***" is amended and replaced in its entirety as follows:

"***Servier Licensed Products***" means the CD19 Product (as set forth in Exhibit 1.10) and if the Option is exercised, additional CD19 Product(s).

(h) Section 2.1 is amended by adding new Section 2.1.3 as follows:

"**2.1.3** In the event Allogene desires to extend the Allogene Territory for CD19 Products to include all or part of the Optional Extended Territory, then Allogene shall provide Servier with (i) a written request to add such Optional Extended Territory to the Allogene Territory, and (ii) an objective demonstration that Allogene, itself or through a partner, has sufficient financial resources to develop the CD19 Products beyond the current Allogene Territory and into the requested Optional Extended Territory. Servier shall consider such request in good faith, and upon the objective showing of sufficient financial resources, Servier shall grant such request to include the requested Optional Extended Territory in the Allogene Territory for all purposes related to CD19 Products under this Agreement. The Parties agree that Allogene will be presumed to have such sufficient financial resources if Allogene enters into a cema-cel or CD19 partnership in China or Japan with a pharmaceutical company having at least one (1) billion dollars in global revenue (a "***Large Pharmaceutical Company***"). Furthermore, if Allogene is actively negotiating a cema-cel or CD19 partnership with a Large Pharmaceutical Company, at Allogene's request, Allogene and Servier shall meet to discuss in good faith a possible further expansion of territorial rights to one or more additional countries that are of interest to such Large Pharmaceutical Company, and in the event Servier, in its sole discretion, agrees to such expansion of the Allogene Territory, such additional country(ies) will be included in the definition of Optional Extended Territory and thereby into the

Allogene Territory for all purposes related to CD19 Products under this Agreement."

(i) Section 2.6 is amended by adding new Section 2.6.5 as follows:

"**2.6.5** In the event Allogene desires to exercise an Option pursuant to Section 2.6, to enable Servier to comply with Servier's obligations under the Servier/Cellectis Agreement regarding additional CD19 Products, Allogene shall assume the following responsibilities:

2.6.5.1 Allogene shall inform Servier of its intention to Develop any additional CD19 Product in writing and promptly, but in no event later than [***] days after Allogene's decision to Develop such new product has been formalized in good faith and in accordance with Allogene's internal policies and procedures applicable to commencing Development of products, and Servier shall be entitled to share such information with Cellectis.

2.6.5.2 Prior to [***], Allogene shall provide a detailed description of such Product construct to Servier and Servier shall share such Product construct in confidence with Cellectis. Should Cellectis reasonably demonstrate that the Product construct proposed by Allogene would have a material adverse patient safety impact that would be reasonably likely to materially affect Cellectis' own CAR-T products, then such Product construct shall not be advanced, unless otherwise agreed upon between the Parties. Servier shall forward Cellectis' comments to Allogene promptly upon receipt thereof, and Allogene acknowledges that Cellectis has the contractual obligation towards Servier to provide its comments no later than [***] days following provision of the description of Product's construct to Cellectis by Servier.

2.6.5.3 To the extent necessary, Allogene shall obtain from Cellectis a direct license under any intellectual property rights owned or otherwise controlled by Cellectis on TAL nucleases which are necessary or useful for the Development, Manufacture or Commercialization of any additional CD19 Product for which Allogene wishes to exercise its Option."

(j) Article 3 (Governance) is amended and replaced in its entirety by a new Article 3 as set forth in **Exhibit A** to this Amendment.

(k) Section 5.2 is amended by adding the following sentence to the end of the paragraph:

"Notwithstanding anything to the contrary in this Agreement, the Parties acknowledge and agree that all co-development performed by the Parties under this Agreement, including all Development performed by Servier, has ceased as of

December 15, 2022 (the "***Co-Development End Date***"), that as of the Co-Development End Date the then-current Global Research and Development Plan and Global Research and Development Budget (version 5 as in force since December 17, 2020) no longer apply to activities performed by either Party under this Agreement, and that no further Global Research and Development Plan or Global Research and Development Budget was approved or is in force and no further Global Research and Development Plan or Global Research and Development Budget will require joint approval by the Parties or otherwise be required, prepared or updated under this Agreement. All sections of the ELA referring to rights or obligations of the Parties with respect to a Global Research and Development Budget shall be interpreted in accordance with this Section 4(k) of this Amendment in such manner so that no such rights and obligations of the Parties exist under the ELA."

(l) Section 5.3.3 is deleted in its entirety.

(m) Section 5.5.3 is amended and replaced in its entirety as follows:

"**5.5.3** The Development Costs incurred by the Parties pursuant to the Global Research and Development Plan in accordance with the Global Research and Development Budget prior to the Co-Development End Date have been borne at sixty percent (60%) by Allogene and forty percent (40%) by Servier. Notwithstanding anything to the contrary in this Agreement, all Development Costs incurred by a Party after the Co-Development End Date shall be borne solely by such Party, unless otherwise agreed to in writing by the Parties."

(n) Section 11.3 is amended and replaced in its entirety as follows:

"**Section 11.3 Regulatory Milestones.** In consideration for the rights granted under this Agreement and subject to Section 11.5.5, Allogene shall pay to Servier the following non-refundable milestone payments upon the achievement of each event by Allogene, its Affiliates or Sublicensees:

Milestone Event	**Milestone Payment**
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

For the avoidance of doubt, each of the payments set forth in this Section 11.3 shall be payable only once for each CD19 Product per Indication reaching the applicable milestone and no milestone would be due under this Amendment for events having occurred prior to the Amendment Date.

(o) Section 11.4 is amended and replaced in its entirety as follows:

"Section 11.4 Commercial Milestones. Subject to Section 11.5.5, with respect to each CD19 Product that is a Licensed Product, Allogene shall pay each of the following sales milestones only upon the first time the aggregated worldwide Net Sales of such CD19 Product reaches the corresponding threshold set forth in the table below. For the avoidance of doubt, each sales milestone shall be payable only once per CD19 Product that is a Licensed Product.

First Time Aggregated Annual Net Sales of a CD19 Product	**Milestone Payment**
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

(p) Section 11.5 is amended and replaced in its entirety as follows:

"**Section 11.5 Royalties**. As partial consideration for the rights granted hereunder in and to Patent Rights and Know How and for Servier's contribution to the Development of the Licensed Products, during the applicable Royalty Term, on a Licensed Product-by-Licensed Product and country-by-country basis, Allogene shall pay to Servier royalties equal to the following percentages of Net Sales of the Licensed Product, subject to adjustment as set forth in Section 11.6 (the "***Royalties***"), as determined separately for each Calendar Quarter, during the Royalty Term by multiplying the royalty rates below, also subject to adjustment as set forth in Section 11.6, by the corresponding amount of the portion of Net Sales achieved by Allogene during such Calendar Quarter, as applicable:

11.5.1 Subject to Section 11.5.5, for that portion of annual Net Sales of Licensed Products sold in the United States that is [***], the royalty rate shall be [***] of such Net Sales;

11.5.2 Subject to Section 11.5.5, for that portion of annual Net Sales of Licensed Products sold in the United States that is between [***] and [***], the royalty rate shall be [***] of such Net Sales;

11.5.3 Subject to Section 11.5.5, for that portion of annual Net Sales of Licensed Products sold in the United States that is [***], the royalty rate shall be [***] of such Net Sales; and

11.5.4 For annual Net Sales of Licensed Products sold in any country in the Extended Territory or the Optional Extended Territory, the royalty rate shall be ten percent (10%) of such Net Sales in such country.

11.5.5 If at any time during the Royalty Term the Parties successfully achieve the assignment of the Servier/Cellectis Agreement from Servier to Allogene in a form acceptable to Servier and Allogene, such assignment shall provide that (i) the payment obligations of Allogene pursuant to Sections 11.3 and 11.4 and 11.5.4 shall terminate in their entirety and (ii) the obligation of Allogene to pay Royalties pursuant to Sections 11.5 shall continue for the Royalty Term, but (x) the royalty rate under Section 11.5.1 shall be reduced to [***] of such Net Sales, (y) the royalty rate payable under Section 11.5.2 shall be reduced to [***] of such Net Sales, (z) the royalty rate payable under Section 11.5.3 shall be reduced to [***] of such Net Sales. The so adjusted royalty rates shall be as follows:

Annual Net Sales of the Products	Royalty (in $) – payments from Allogene to Servier
[***]	[***]

In addition, Allogene shall assume all of Servier's milestone and royalty payment obligations towards Cellectis under the Servier/Cellectis Agreement relating to all CD19 Products.

(q) Clarifications to the Amended and Restated Sections 11.3, 11.4 and 11.5; Triggering of Payments; Schedule 2.6.4.2. The Sections 11.3, 11.4 and 11.5 as amended in this Amendment shall supersede the financial terms indicated in Sections 11.3, 11.4, 11.5 and Schedule 2.6.4.2 of the ELA entirely. Schedule 2.6.4.2 of the ELA is hereby deleted in its entirety. In order to avoid any discrepancy between the milestone payments' triggering events under the ELA on one hand and under the Servier/Cellectis Agreement on the other hand, the Parties agree any clinical activity performed by Allogene under the ELA that triggers a contractually obligated payment by Servier to Cellectis under the Servier/Cellectis Agreement existing as of the Amendment Date, shall also trigger a corresponding payment from Allogene to Servier under the ELA and, conversely, no milestone payment hereunder shall be triggered in the absence of a corresponding

contractually obligated milestone payment by Servier to Cellectis under the Servier/Cellectis Agreement existing as of the Amendment Date (acknowledging that the rates of the royalties payable by Allogene to Servier under Section 11.5 of the ELA and by Servier to Cellectis under the Servier/Cellectis Agreement differ). The milestone events set forth above shall be interpreted consistent with this obligation.

(r) Section 11.8.2 is amended by addition of the following sentence at the end:

With the first sales report provided by Allogene to Servier after the end of a given calendar year, Allogene's sales report for the Allogene Territory shall provide a reconciliation report of Net Sales as accounted by Allogene pursuant to its Accounting Standards during the previous calendar year versus the amount of Net Sales as would be applicable if calculated under IFRS. The Parties shall reconcile any royalty and milestone payments on the basis of such reconciliation report in such a manner that Allogene either pays any required additional amounts to Servier or Servier issues a credit note to Allogene for overpaid amounts.

(s) Sections 15.1 and 15.2 are amended and replaced in their entirety as follows:

Section 15.1 Indemnification by Allogene in the Allogene Territory.

15.1.1 Allogene shall, at its sole expense, defend, indemnify, and hold harmless Servier, the Affiliates of Servier, and their respective officers, directors, employees successors, and assigns (each, a "***Servier Indemnitee***") from and against any and all Third Party Claims that arise in or derive from the Allogene Territory and are connected or related in any way whatsoever to the Development, Regulatory Material, Regulatory Approval, Manufacturing, or Commercialization of the Licensed Product during a period starting on the Effective Date and ending on the Amendment Date.

15.1.2 Except for Third Party Claims for which Servier indemnifies Allogene under Section 6, Allogene shall, at its sole expense, defend, indemnify, and hold harmless each Servier Indemnitee from and against any and all Third Party Claims that are connected or related in any way whatsoever to the Development, Regulatory Material, Regulatory Approval, Manufacturing, medical affairs activities pursuant to Section 6.1 or Commercialization of the Licensed Product by or on behalf of Allogene after the Amendment Date.

Section 15.2 Indemnification by Servier in the Servier Territory. Servier shall, at its sole expense, indemnify, and hold harmless Allogene, the Affiliates of Allogene, and their respective officers, directors, employees successors, and assigns (each, a "***Allogene Indemnitee***") from and against any and all Third Party Claims that arise in or derive from the Servier Territory and are connected or related in any way whatsoever to the Research, Development, Regulatory Material, Regulatory Approval, Manufacturing, medical affairs activities pursuant to Section 6.1 or Commercialization of the Licensed Product during a period starting on the

Effective Date and ending on the Amendment Date. Nothing in this Section 15 shall relieve Servier of its indemnification obligations under Section 6 of the Amendment.

(t) Section 16.2.6 is amended and replaced in its entirety as follows:

Either Party may terminate this Agreement if, at any time, the other Party files in any court or agency pursuant to any statute or regulation of any state or country, a petition in bankruptcy or insolvency or for the appointment of a receiver or trustee of the Party or of substantially all of its assets, or if the other Party proposes a written agreement of composition or extension of substantially all of its debts, or if the other Party is served with an involuntary petition against it, filed in any bankruptcy or insolvency proceeding, and such petition is not dismissed within ninety (90) days after the filing thereof, or if the other Party proposes or becomes a party to any dissolution or liquidation, or if the other Party makes an assignment of substantially all of its assets for the benefit of creditors. Upon the bankruptcy of any Party, the non-bankrupt Party will further be entitled to a complete duplicate of, or a complete access to, all Data generated by the bankrupt Party pursuant to this Agreement, and such Data, if not already in its possession, will be promptly delivered to the non-bankrupt Party (at the non-bankrupt Party's expense), unless the bankrupt Party elects to continue, and continues, to perform all of its obligations under this Agreement.

(u) Section 17.5 is amended and replaced in its entirety as follows:

Section 17.5 Notices. Any notice or request required or permitted to be given under or in connection with this Agreement will be deemed to have been sufficiently given if in writing and personally delivered or sent by certified mail (return receipt requested), email or overnight express courier service (signature required), prepaid, to the Party for which such notice is intended, at the address set forth for such Party below:

If to Allogene:
Allogene Therapeutics, Inc.
210 E. Grand Ave.
South San Francisco, CA 94080
U.S.A.
Attention: Legal Department
Email: [***]

If to Servier:
Les Laboratoires Servier
50 rue Carnot
92284 Suresnes Cedex
France
Attention: Alliance Management Director & US Licenses

Email: [***]

With a copy to:
Attention: General Secretary / Director Contract Department
Les Laboratoires Servier
50 rue Carnot
92284 Suresnes Cedex
France

or to such other address for such Party as it will have specified by like notice to the other Parties, provided that notices of a change of address will be effective only upon receipt thereof. If delivered personally, the date of delivery will be deemed to be the date on which such notice or request was given. If sent by overnight express courier service, the date of delivery will be deemed to be the next business day after such notice or request was deposited with such service. If sent by certified mail, the date of delivery will be deemed to be the third (3rd) day after such notice or request was deposited with the postal service. If sent by email, the date of delivery will be deemed to be the day that the Party giving notice receives electronic confirmation of sending from its email provider.

(v) Replacement of "Pfizer" by "Allogene". All occurrences of the term "Pfizer" in the ELA shall be replaced by the term "Allogene".

5. The Sections 1.85 and 1.87 are amended and replaced in their entirety as follows:

"***1.85 "Allogene Quarter"*** means each of the four quarterly fiscal periods observed by Allogene commencing on January 1, April 1, July 1, and October 1 of any Allogene Year***.***"

"***1.87 "Allogene Year"*** means the twelve (12) month fiscal period observed by Allogene commencing on January 1."

6. LTFU. As soon as practicable after the Amendment Date but in any event prior to [***], the Parties shall discuss and agree on (a) a transfer of the sponsorship of the clinical study n°CL1-068587-003 entitled "Long-Term Follow-Up (LTFU) study of patients who have previously been exposed to UCART19V1 (allogeneic engineered T-cells expressing a lentiviral-based anti-CD19 chimeric antigen receptor)" (Product number: S068587) (the "***LTFU***") from Servier to Allogene, or (b) a consolidation of the patients under the LTFU into another Allogene-sponsored long-term follow up study satisfying the same regulatory obligations and yet to be set up by Allogene. The Parties' agreement on the transfer or consolidation shall cover the exact process to be performed by the Parties, including specific timelines, and an allocation of costs for such transfer or consolidation. Servier will, at its sole expense, indemnify, and hold harmless Allogene Indemnitees from and against any and all Third Party Claims arising from the LTFU prior to such transfer of the study sponsorship to Allogene or, as applicable, the transfer of the patients to Allogene's long term follow-up study. Upon completion of such transfer, on a country-by-country basis, Allogene will bear all costs of the conduct of the

LTFU or, as applicable, the conduct of the patients under another Allogene-sponsored long-term follow up study.

7. Other Payments.

   (a) Research Payment. [***].

   (b) Milestone for Phase I Study in CLL. Allogene has informed Servier that it has initiated a Phase 1b Clinical Study with a CD19 Product in the Indication CLL, and it envisages to start dosing patients shortly after the Amendment Date. [***].

   (c) No Further Payments. Except as expressly provided for in this Amendment (including pursuant to the amended ELA language set forth in Section 4 of this Amendment), neither Servier nor Allogene shall be obligated to make any further payments to the other Party under the ELA.

8. TALEN CD19/CD70 Allogeneic CAR-T Product. [***].

9. EGFRVIII. Through a letter dated December 21, 2023, Servier has informed Allogene that it is not willing to engage further in the Development of Licensed Products that are EGFRVIII Products. As a consequence, in accordance with the terms and conditions of the ELA, the Parties agree that (i) Servier reverts back the rights relating to EGFRVIII Products to Allogene and (ii) the target EGFRVIII shall no longer be a Collaboration Target under the ELA and that (iii) all licenses and license options of Servier in relation to EGFRVIII Products shall be terminated. As of Servier's notice to Allogene dated March 3, 2023, and in accordance with Section 12.2.2.1 of the ELA, Allogene shall be solely responsible, at its own expense, for preparing, filing, prosecuting, and maintaining all Allogene Patent Rights that cover specifically and solely the EGFRVIII Products and for conducting any interferences, re-examinations, reissues, and oppositions relating to such Allogene Patent Rights. Servier shall have no obligations towards Allogene in respect to Development of EGFRVIII Products or with respect to preparation, filing, maintenance and prosecution of Patent Rights covering the EGFRVIII Products. The Parties agree and confirm that there is no and there was no Global Research and Development Plan and/or Global Research and Development Budget approved by the Parties with respect to the Development of EGFRVIII Products. Servier shall destroy (except for one copy for archival and compliance purposes) Allogene's Confidential Information to the extent related to Allogene's preclinical activities with respect to EGFRVIII. All sections of the ELA referring to rights or obligations of Servier with respect to EGFRVIII or EGFRVIII Products shall be interpreted in accordance with this Section 9 of this Amendment, in such manner that no such rights and obligations of Servier exist under the ELA.

10. Servier Patent Rights and Joint IP. **Exhibit D** contains a list of all Servier Patent Rights and all Patent Rights within Joint IP that cover CD19 Products and that are in existence as of the Amendment Date.

(a) With regard to the patent family titled "*Methods and compositions for dosing of allogenic Chimeric Antigen Receptor T cells*" which is co-owned by the Parties, Allogene shall have the right, but not the obligation, to maintain, prosecute and enforce the Patent Rights in such patent family at Allogene's sole expense. Allogene may elect a patent counsel for this purpose at its sole discretion and expense. Allogene shall provide Servier with (i) an annual report on the prosecution status of the patent family under Section 9(a) and maintenance activities, and (ii) upon written request from Servier, periodic reports regarding such status; and the obligations to inform, cooperate, and assist with respect to the prosecution and maintenance actions for this patent family under Section 12.2.1 shall not apply. To the extent that Allogene at any time wishes not to prosecute or maintain any Patent Right within Joint IP in any country (in or outside of the Allogene Territory), Allogene will provide Servier with [***] days prior written notice to such effect, in which event Servier may elect to continue prosecution or maintenance of such Patent Right, and Allogene, upon Servier's written request received within such [***] day period, will execute such documents and perform such acts, at Servier's expense, as may be reasonably necessary to assign to Servier Allogene's right, title and interest to such jointly owned Patent Right and to permit Servier to own, prosecute and maintain such Patent Right, provided that Servier shall and does hereby grant to Allogene a non-exclusive, sublicensable, perpetual, irrevocable, royalty-free, fully paid-up worldwide license to practice and exploit such Patent Right for any and all purposes excluding (x) during the Term, uses for Licensed Products and Competing Products except as authorized under this Agreement, and (y) after the Term, uses for Licensed Products. In the event that the Servier/Cellectis Agreement is later assigned to Allogene, concurrently therewith Servier shall assign all its ownership rights in this patent family to Allogene, provided that the Patent Right in this formerly jointly owned patent family shall continue to account for the calculation of the Royalty Term despite such assignment.

(b) With regard to the patent family titled "*CD19 specific Chimeric Antigen Receptor and uses thereof*" which is controlled by Servier and/or Cellectis, the prosecution and maintenance shall be governed by and conducted in accordance with Article 12.2.2 of the ELA, provided however that Allogene shall reimburse Servier for all reasonable external costs incurred by Servier after the Amendment Date for the prosecution and maintenance of such Servier Patent Rights in the Allogene Territory (including fees of patent counsel) on an annual basis. Servier shall continue to prosecute, maintain, and bear costs associated with such Servier Patent Rights in the Optional Extended Territory. Upon Servier granting a request by Allogene to include Optional Extended Territory in the Allogene Territory pursuant to Section 2.1.3 of the ELA (the "***Optional Extended Territory Grant Date***"), Allogene shall bear the costs associated with such Optional Extended Territory to which the grant relates as of the Optional Extended Territory Grant Date. In addition, Allogene agrees to reimburse Servier for the external costs reasonably incurred to prosecute and maintain such Servier Patent Rights in the Optional Extended Territory as of the Amendment Date. Each Party shall bear its

internal costs incurred by such Party for the prosecution and maintenance of such Servier Patent Rights alone.

11. ROR1 Target. In the amendment agreement to the Servier/Cellectis Agreement dated March 4, 2020, Servier reverted to Cellectis rights over certain allogeneic CAR T-cell targets previously covered by the original Servier/Cellectis Agreement. This reversion of rights included rights to the ROR1 target which were thereafter not subject to the ELA. All sections of the ELA referring to rights or obligations of the Parties with respect to ROR1 Products shall be interpreted in accordance with this Section 10 of this Amendment so that no such rights and obligations of the Parties exist under the ELA.

12. [***].

(a) [***].

[***].

(b) [***].

[***].

(c) [***].

[***].

13. [***].

(a) [***].

(b) [***].

(c) [***].

14. Mutual Support. Each Party agrees to execute, acknowledge, and deliver such further instruments, and do all further similar acts, as may be necessary or appropriate to carry out the purposes and intent of this Amendment. In addition to the obligations set forth in the ELA and this Amendment, Allogene agrees to reasonably assist Servier in complying with all development diligence and reporting obligations of Servier under the Servier/Cellectis Agreement. The Parties agree to cooperate with each other and negotiate in good faith any amendment to the ELA as reasonably necessary to ensure compliance with the provisions of the Servier/Cellectis Agreement.

15. [***].

(a) [***].

(b) [***].

16. Further Amendment of the ELA. The Parties acknowledge that there are a number of additional provisions included in the ELA that will require further amendment to more accurately reflect the modified relationship between the Parties. For example, certain Servier licensing, regulatory cross-referencing, option and opt-in rights, and certain Servier obligations relating to manufacturing, medical affairs and development matters may no longer be applicable. Further, the Global Research and Development Plan shall be replaced by a "Annual activity report on Servier Licensed Products" the details of which are set out in **Exhibit A**. The Parties agree to cooperate with each other and prepare in good faith an Amended and Restated ELA by [***], subject to extension by the Parties, which will address such additional matters.

17. Effect on the ELA; General Provisions. Except as set forth in this Amendment, the terms and provisions of the ELA continue to be in full force and effect. Except as otherwise expressly set forth herein, this Amendment shall be governed by the provisions of the ELA including with respect to the choice of law, disputes, and successors and assigns. Each Party represents and warrants that it is legally permitted to enter into this Amendment and perform the obligations contemplated thereby and that the terms and obligations of this Amendment are not inconsistent with any other obligation which it may have. This Amendment may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. The exchange of a fully executed Amendment by fax or email .PDF shall bind the Parties to the terms and conditions of this Amendment.

18. Communication. The text set forth in **Exhibit E** shall be used (i) by Servier to notify Cellectis of, and (ii) by Allogene to publicly announce, respectively, the execution of the Amendment.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be executed in multiple originals by their duly authorized officers as of May 10, 2024, with effective date as of the Amendment Date.

LES LABORATOIRES SERVIER

By: /s/ Damien Catoir
Name: Damien Catoir
Title: EVP, General Counsel and Corporate Secretary

INSTITUT DE RECHERCHES INTERNATIONALES SERVIER

By: /s/ Damien Catoir
Name: Damien Catoir
Title: EVP, General Counsel and Corporate Secretary

ALLOGENE THERAPEUTICS, INC.

By: /s/ Earl Douglas
Name: Earl Douglas
Title: SVP, General Counsel and Corporate Secretary

Exhibit 1.10

CD19 Products

[***].

Exhibit A

New Governance Structure, Updated Article 3

I. Objectives:

1. Maintain the existing governance for co-development activities, if any in the future, and/or for past activities.
2. Add a governance for the Licensor/Licensee relationship for the non co developed activities: i.e., activities conducted by Allogene for the Allogene Territory.

II. Specific Governance for non co developed activities

1. **Allogene's development of CD 19 Products in the Allogene Territory.** Allogene shall provide updates to Servier regarding Allogene's activities relevant to the CD 19 Products for the Allogene Territory through:
   a. Monthly reports (no later than 10th of each month) in the same form as currently being provided by Allogene as of the date of this Amendment;
   b. Sharing of material regulatory information pursuant to Section 7 (including protocol amendments, new studies protocols, IND packages, Clinical Study reports and results, material safety information, regulatory meetings packages and material communications with Regulatory Authorities), and scientific papers, abstracts, and posters pursuant to Section 13.7;
   c. Joint Steering Committee ("***JSC***") meetings and other sub-committee meetings as deemed necessary by the JSC; and
   d. An "Annual activity report on Servier Licensed Products" to be delivered to Servier by January 15 of each calendar year describing Allogene's development efforts for the prior calendar year, and next steps to further develop and commercialize CD 19 Products, including estimated clinical and regulatory timelines for such planned activities.
2. **Joint Steering Committee (JSC).** The JSC shall meet twice a year to provide a forum for the Parties to discuss activities under the Agreement, including the information reported by Allogene in Section II.1. above and any relevant updates thereto since the last JSC meeting. The JSC may also agree to form additional sub-committees to meet from time to time to conduct further discussions regarding specific activities under the Agreement.
3. **Joint Executive Committee (JEC)**. The JEC shall meet once a year to manage the overall strategic alliance objectives of the Parties under the Agreement and resolve any disputed matters that may arise in the performance of the Agreement.

Exhibit B

Form of Escrow Agency Agreement

[***]

Exhibit C

Triggering Events

[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

Patent Rights in Joint IP

[***]							
[***]	[***]		[***]		[***]		[***]
	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

Servier Patent Rights

[***]

[***]	[***]		[***]		[***]		[***]
	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]	[***]	[***]	[***]

Exhibit E

Communication

[***].

CERTAIN INFORMATION CONTAINED IN THIS EXHIBIT, MARKED BY [***], HAS BEEN EXCLUDED BECAUSE THE REGISTRANT HAS DETERMINED THE INFORMATION IS BOTH NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDMENT NO. 1 TO AMENDED AND RESTATED COLLABORATION AND LICENSE AGREEMENT

This **AMENDMENT NO. 1 TO AMENDED AND RESTATED COLLABORATION AND LICENSE AGREEMENT** (this "***Amendment***"), is made and effective as of May 17, 2024 (the "***Amendment Effective Date***"), is made by and between **Allogene Therapeutics, Inc.**, a Delaware corporation with its principal place of business at 210 East Grand Ave., South San Francisco, CA 94080 ("***Allogene***"), and **Notch Therapeutics (Canada) Inc.**, having an address at 300-2233 Columbia St, Vancouver, BC V5Y 0M6 ("***Notch***"). Allogene and Notch are sometimes referred to herein, individually, as a "***Party***" and, collectively, as the "***Parties***." Capitalized terms not defined herein shall have the meanings ascribed to them in the License Agreement.

RECITALS

WHEREAS, the Parties previously entered into that certain Amended and Restated Collaboration and License Agreement, effective as of January 17, 2024 (the "***License Agreement***"), and the Parties now desire to amend the License Agreement as provided herein.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing premises and the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. **Amendment to Section 6.8**. The existing table in Section 6.8 of the License Agreement is hereby deleted in its entirety and replaced with the following table:

Annual Net Sales	**Royalty Rate for T Cell Products**	**Royalty Rate for NK Products**
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
Annual Net Sales	**Royalty Rate for T Cell Products**	**Royalty Rate for NK C Products**
[***]	[***]	[***]

2. **Amendment to Section 6.9(c)**. The existing Section 6.9.(c) of the License Agreement is hereby deleted in its entirety and replaced with the following:

"(c) Notwithstanding subsection (a) above, in no event shall the royalty rate on the sale of any Product in any country [***]."

3 . **Amendment to Section 6.19**. The existing Section 6.19 of the License Agreement is hereby deleted in its entirety and replaced with the following:

"6.19 **Subsequent Notch Financings**. If, following the Restatement Effective Date, Notch's parent, Notch Therapeutics, Inc., a Delaware corporation ("**Notch US**"), obtains external equity financing from institutional investors (each such financing, a "**Subsequent Financing Round**"), Notch US shall, in connection with each Subsequent Financing Round and pursuant to a securities issuance agreement in substantially the form attached hereto as Exhibit I, issue to Allogene, for no additional consideration, equity securities of the same class and series issued to such other investors in such Subsequent Financing Round (the "**Equity Securities**"), equal to the least of (a) [***](the "**Maximum Value**"), (b) [***], and (c) [***]. The obligation of Notch US to issue equity securities to Allogene pursuant to this Section 6.19 shall expire immediately following the earlier to occur of (x) the issuance of Equity Securities to Allogene with an aggregate value of the Maximum Value, or (y) an initial public offering by Notch US of its common stock or the listing of Notch US common stock on a national securities exchange. Notwithstanding anything to the contrary provided for herein, in no event will Notch US be obligated to issue more than the Maximum Value in aggregate value of Equity Securities to Allogene under this Section 6.19."

4 . **Miscellaneous**. This Amendment shall not amend or modify the covenants, terms, conditions, rights and obligations of the Parties under the License Agreement, except as specifically set forth herein. The License Agreement shall continue in full force and effect in accordance with its terms as amended by this Amendment. This Amendment shall be governed in all respects by the laws of the State of New York exclusively without regard to any conflict of law rule that would result in the application of the laws of any jurisdiction other than the State of New York. This Amendment may be executed in two (2) or more counterparts, each of which shall be deemed to be an original, and may be executed and delivered through the email of pdf copies of the executed Amendment.

[*Signature page follows*]

IN WITNESS WHEREOF, the Parties have caused this Amendment to be duly executed by their authorized representative as of the Amendment Effective Date.

ALLOGENE THERAPEUTICS, INC

By: /s/ Geoffrey Parker
Name: Geoffrey Parker
Title: Chief Financial Officer

NOTCH THERAPEUTICS INC.
By: /s/ David Main
Name: David Main
Title: Chief Executive Officer

CERTAIN INFORMATION CONTAINED IN THIS EXHIBIT, MARKED BY [***], HAS BEEN EXCLUDED BECAUSE THE REGISTRANT HAS DETERMINED THE INFORMATION IS BOTH NOT MATERIAL AND IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

AMENDMENT 1

to

STRATEGIC COLLABORATION AGREEMENT

This Amendment 1 ("**Amendment 1**") is effective as of April 4, 2024 (the "**Amendment 1 Effective Date**") by and between Foresight Diagnostics, Inc., having a principal place of business at 2865 Wilderness Place, Boulder, CO 80301 ("**Foresight**"), and Allogene Therapeutics, Inc., having a principal place of business at 210 East Grand Avenue, South San Francisco, CA 94080 ("**Company**") and amends the Strategic Collaboration Agreement the Parties entered into as of January 3, 2024. Foresight and Company are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**."

RECITALS:

WHEREAS Foresight seeks to access certain Company Confidential Information and additional Materials for [***] and Company agrees to provide such Confidential Information and additional Materials;

WHEREAS, Company has ongoing Clinical Studies in large B-cell lymphoma using its Company Products, [***]; and

WHEREAS, [***].

NOW THEREFORE, for good and valuable consideration, the Parties agree as follows:

1) Exhibit A of the Strategic Collaboration Agreement is hereby amended to add the following Section II.C to the end of Section II.

[***].

2) Exhibit A of the Strategic Collaboration Agreement is hereby amended to add the following Section III.C to the end of Section III:

[***].

3) Exhibit A of the Strategic Collaboration Agreement is hereby amended to add the following Section IV.

[***].

4) Exhibit A of the Strategic Collaboration Agreement is hereby amended to add the following Section V.

[***].

5) Any capitalized terms not otherwise defined herein shall have the meaning set forth in the Strategic Collaboration Agreement [***].

6) The Strategic Collaboration Agreement, including as amended by this Amendment 1, forms the entire understanding between the Parties. Except as expressly amended by this Amendment 1, all other terms and conditions of the Strategic Collaboration Agreement shall remain in full force and effect as entered into.

The Parties have caused this Amendment 1 to be executed by their duly authorized representatives.

FORESIGHT DIAGNOSTICS, INC.	**ALLOGENE THERAPEUTICS, INC.**
BY: /s/ Jacob Chabon	BY: /s/ Zachary Roberts
NAME: Jacob Chabon	NAME: Zachary Roberts
TITLE: CEO	TITLE: Head of R&D and CMO
DATE: 07 April 2024	DATE: 04/05/24

Exhibit 31.1

CERTIFICATION 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, David Chang, M.D., Ph.D., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Allogene Therapeutics, 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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 7, 2024

/s/ David Chang

David Chang, M.D., Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION 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, Geoffrey Parker, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Allogene Therapeutics, 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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 7, 2024

/s/ Geoffrey Parker

Geoffrey Parker
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

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

In connection with the quarterly report of Allogene Therapeutics, Inc. (the "Company") on Form 10-Q for the quarter ended June 30, 2024 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David Chang, M.D., Ph.D., President and Chief Executive Officer of the Company, and I, Geoffrey Parker, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: August 7, 2024

/s/ David Chang

David Chang, M.D., Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

Date: August 7, 2024

/s/ Geoffrey Parker

Geoffrey Parker
Chief Financial Officer
(Principal Financial Officer)

This certification shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.