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

FORM 10-Q

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

For the quarterly period ended September 30, 2022

OR

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

For the transition period from to

Commission file number 001-38596

REPLIMUNE GROUP, INC.
(Exact name of registrant as specified in its charter)

Delaware	**82-2082553**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

500 Unicorn Park
Woburn MA 01801
(Address of principal executive offices)
(Zip Code)
(781) 222-9600
(Registrant's telephone number, including area code)

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 ☒

The number of shares of the registrant's Common Stock, par value $0.001 per share, outstanding as of October 31, 2022 was 49,739,407.

REPLIMUNE GROUP, INC.

FORM 10-Q

Table of Contents

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

REPLIMUNE GROUP, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Amounts in thousands, except share and per share amounts)
(Unaudited)

	September 30, 2022	March 31, 2022
Assets		
Current assets:		
Cash and cash equivalents	$ 88,930	$ 105,948
Short-term investments	282,890	289,707
Research and development incentives receivable	2,589	3,055
Prepaid expenses and other current assets	4,981	5,267
Total current assets	379,390	403,977
Property, plant and equipment, net	7,910	7,933
Research and development incentives receivable, non-current	1,296	—
Restricted cash	1,636	1,636
Right-to-use asset - operating leases	4,984	5,552
Right-to-use asset - financing leases	40,879	42,094
Total assets	$ 436,095	$ 461,192
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 3,996	$ 3,732
Accrued expenses and other current liabilities	15,939	13,392
Operating lease liabilities, current	1,002	1,070
Financing lease liabilities, current	2,600	2,562
Total current liabilities	23,537	20,756
Operating lease liabilities, non-current	4,280	4,801
Financing lease liabilities, non-current	24,206	24,406
Total liabilities	$ 52,023	$ 49,963
Commitments and contingencies (Note 11)		
Stockholders' equity		
Common stock, $0.001 par value; 150,000,000 shares authorized as of September 30, 2022 and March 31, 2022; 49,739,407 and 47,338,660 shares issued and outstanding as of September 30, 2022 and March 31, 2022, respectively	50	47
Additional paid-in capital	777,650	723,359
Accumulated deficit	(396,559)	(311,204)
Accumulated other comprehensive income (loss)	2,931	(973)
Total stockholders' equity	384,072	411,229
Total liabilities and stockholders' equity	$ 436,095	$ 461,192

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

REPLIMUNE GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended September 30,		Six Months Ended September 30,	
	2022	2021	2022	2021
Operating expenses:				
Research and development	$ 28,834	$ 19,902	$ 58,312	$ 38,456
Selling, general and administrative	12,745	9,345	24,143	18,172
Total operating expenses	41,579	29,247	82,455	56,628
Loss from operations	(41,579)	(29,247)	(82,455)	(56,628)
Other income (expense):				
Research and development incentives	574	725	1,425	1,513
Investment income	1,112	80	1,455	172
Interest expense on finance lease liability	(550)	(557)	(1,102)	(1,115)
Other (expense) income	(2,659)	(356)	(4,678)	(608)
Total other (expense) income, net	(1,523)	(108)	(2,900)	(38)
Net loss	$ (43,102)	$ (29,355)	$ (85,355)	$ (56,666)
Net loss per common share, basic and diluted	$ (0.79)	$ (0.56)	$ (1.57)	$ (1.09)
Weighted average common shares outstanding, basic and diluted	54,770,291	52,081,325	54,492,395	51,962,795

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

REPLIMUNE GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Amounts in thousands)
(Unaudited)

	Three Months Ended September 30,		Six Months Ended September 30,	
	2022	2021	2022	2021
Net loss	$ (43,102)	$ (29,355)	$ (85,355)	$ (56,666)
Other comprehensive loss:				
Foreign currency translation gain	2,330	219	4,067	443
Net unrealized gain (loss) on short-term investments, net of tax of $0	81	—	(163)	(40)
Comprehensive loss	$ (40,691)	$ (29,136)	$ (81,451)	$ (56,263)

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

REPLIMUNE GROUP, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Amounts in thousands, except share amounts)
(Unaudited)

	Common stock		Additional paid-in capital	Accumulated deficit	Accumulated other comprehensive loss	Total stockholders' equity
	Shares	Amount				
Balances as of March 31, 2022	47,338,660	$ 47	$ 723,359	$ (311,204)	$ (973)	$ 411,229
Issuance of common stock through ATM sales, net of offering costs	1,686,438	2	31,035	—	—	31,037
Foreign currency translation adjustment	—	—	—	—	1,737	1,737
Unrealized loss on short-term investments	—	—	—	—	(244)	(244)
Exercise of stock options	124,028	—	1,562	—	—	1,562
Vesting of RSUs	149,341	—	—	—	—	—
Stock-based compensation expense	—	—	7,194	—	—	7,194
Net loss	—	—	—	(42,253)	—	(42,253)
Balances as of June 30, 2022	49,298,467	49	763,150	(353,457)	520	410,262
Issuance of common stock through ATM sales, net of offering costs	340,000	1	6,400	—	—	6,401
Foreign currency translation adjustment	—	—	—	—	2,330	2,330
Unrealized loss on short-term investments	—	—	—	—	81	81
Exercise of stock options	88,252	—	1,108	—	—	1,108
Vesting of RSUs	12,688	—	—	—	—	—
Stock-based compensation expense	—	—	6,992	—	—	6,992
Net loss	—	—	—	(43,102)	—	(43,102)
Balances as of September 30, 2022	49,739,407	50	777,650	(396,559)	2,931	384,072
Balances as of March 31, 2021	46,566,481	$ 47	$ 692,243	$ (193,168)	$ (394)	$ 498,728
Foreign currency translation adjustment	—	—	—	—	224	224
Unrealized loss on short-term investments	—	—	—	—	(40)	(40)
Exercise of stock options	163,970	—	1,173	—	—	1,173
Stock-based compensation expense	—	—	6,250	—	—	6,250
Net loss	—	—	—	(27,311)	—	(27,311)
Balances as of June 30, 2021	46,730,451	47	699,666	(220,479)	(210)	479,024
Foreign currency translation adjustment	—	—	—	—	219	219
Unrealized loss on short-term investments	—	—	—	—	—	—
Exercise of stock options	124,880	—	1,211	—	—	1,211
Stock-based compensation expense	—	—	6,313	—	—	6,313
Net loss	—	—	—	(29,355)	—	(29,355)
Balances as of September 30, 2021	46,855,331	47	707,190	(249,834)	9	457,412

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

REPLIMUNE GROUP, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)
(Unaudited)

	Six Months Ended September 30,	
	2022	**2021**
Cash flows from operating activities:		
Net loss	$ (85,355)	$ (56,666)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	14,186	12,563
Depreciation	1,237	1,050
Net amortization of premiums and discounts on short-term investments	(161)	1,284
Changes in operating assets and liabilities:		
Research and development incentives receivable	(1,417)	(1,513)
Prepaid expenses and other current assets	159	(1,252)
Operating lease, right-of-use-asset	252	217
Finance lease, right-of-use-asset	1,214	1,214
Accounts payable	698	750
Accrued expenses and other current liabilities	2,779	1,293
Operating lease liabilities	(257)	(215)
Net cash used in operating activities	(66,665)	(41,275)
Cash flows from investing activities:		
Purchases of property, plant and equipment	(1,464)	(719)
Purchase of short-term investments	(193,685)	(111,356)
Proceeds from sales and maturities of short-term investments	200,500	128,015
Net cash provided by investing activities	5,351	15,940
Cash flows from financing activities:		
Proceeds from issuance of common stock through ATM sales, net of offering costs	37,438	—
Principal payment of finance lease obligation	(163)	(114)
Proceeds from exercise of stock options	2,670	2,384
Net cash provided by financing activities	39,945	2,270
Effect of exchange rate changes on cash, cash equivalents and restricted cash	4,351	516
Net decrease in cash, cash equivalents and restricted cash	(17,018)	(22,549)
Cash, cash equivalents and restricted cash at beginning of period	107,584	184,154
Cash, cash equivalents and restricted cash at end of period	$ 90,566	$ 161,605
Supplemental disclosure of non-cash investing and financing activities:		
Purchases of property and equipment included in accounts payable	96	177

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

REPLIMUNE GROUP, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Dollars in thousands, except share and per share amounts)
(Unaudited)

1. Nature of the business

Replimune Group, Inc. (the "Company") is a clinical-stage biotechnology company committed to applying its leading expertise in the field of oncolytic immunotherapy to transform the lives of cancer patients through its novel tumor-directed oncolytic immunotherapies. The Company's proprietary tumor-directed oncolytic immunotherapy product candidates are designed and intended to maximally activate the immune system against cancer. Replimune Group, Inc., whose predecessor was founded in 2015, is the parent company of its wholly owned, direct and indirect subsidiaries: Replimune Limited ("Replimune UK"); Replimune, Inc. ("Replimune US"); Replimune Securities Corporation; and Replimune (Ireland) Limited.

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

Basis of presentation

The accompanying consolidated financial statements have been prepared on the basis of continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the ordinary course of business. The Company has incurred recurring losses since its inception, including net losses of $43.1 million and $29.4 million for the three months ended September 30, 2022 and 2021, respectively and net losses of $85.4 million and $56.7 million for the six months ended September 30, 2022 and 2021, respectively. In addition, as of September 30, 2022, the Company had an accumulated deficit of $396.6 million. The Company expects to continue to generate operating losses for the foreseeable future. As of the issuance date of these consolidated financial statements, the Company expects that its cash and cash equivalents and short-term investments will be sufficient to fund its operating expenses and capital expenditure requirements through at least 12 months from the issuance of these consolidated financial statements.

Impact of the COVID-19 coronavirus

In December 2019, a novel strain of coronavirus, which causes the disease known as COVID-19, was reported to have surfaced in Wuhan, China. Since then, COVID-19 coronavirus has spread globally. In March 2020, the World Health Organization declared the COVID-19 outbreak a pandemic and the U.S. government imposed travel restrictions on travel between the United States, Europe and certain other countries. The impact of this pandemic has been, and may continue to be, extensive in many aspects of society, which has resulted, and may continue to result, in significant disruptions to the global economy as well as businesses and capital markets around the world.

The Company is continuing to generally monitor the spread of COVID-19 and, throughout the pandemic, has implemented measures designed to comply with applicable federal, state and local guidelines, as well as care for the Company's employee's health and well-being. The Company will continue to examine its protocols as the pandemic and health guidance evolves. The COVID-19 pandemic continues to affect the United States and global economies and has affected and may continue to affect the Company's operations and those of third parties on which it relies, including by causing disruptions in our raw material and supply of other materials, the manufacturing of its product candidates and its developing commercialization processes. However, the extent of these delays is currently unknown and has and will likely continue to vary. In addition, the Company may incur unforeseen costs as a result of disruptions in raw material supplies, clinical product supplies, and preclinical studies or clinical trial delays. The full extent to which the COVID-19 pandemic will directly or indirectly impact the Company's business, results of operations and financial condition will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information that may emerge concerning COVID-19, the actions taken in an effort to contain it or to potentially treat or continue to vaccinate against COVID-19 and the economic impact on local, regional, national and international markets. The Company continues to monitor this situation and the possible effects on its financial condition, liquidity, operations, suppliers, supplies, industry and workforce.

2. Summary of significant accounting policies

Principles of consolidation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") and include the accounts of the Company and its direct and indirect wholly owned subsidiaries, Replimune UK, Replimune US, Replimune Securities Corporation and Replimune (Ireland) Limited after elimination of all intercompany accounts and transactions.

Use of estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting periods. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, the accrual for research and development expenses and the valuation of stock-based awards. The Company bases its estimates on historical experience, known trends and other market-specific or other relevant factors that it believes to be reasonable under the circumstances.

The full extent to which the COVID-19 pandemic will directly or indirectly impact the Company's business, results of operations and financial condition, including, expenses, research and development costs and employee-related amounts, will depend on future developments that are highly uncertain, including as a result of new information that may emerge concerning COVID-19 and the actions taken to contain it or treat COVID-19. The Company has made estimates of the impact of COVID-19 within the Company's financial statements and there may be changes to those estimates in future periods.

On an ongoing basis, management evaluates its estimates in light of reasonable changes in circumstances, facts and experience. Changes in estimates are recorded in the period in which they become known. Actual results could differ from those estimates or assumptions.

Unaudited interim financial information

The accompanying consolidated balance sheet as of September 30, 2022, the consolidated statements of operations, of comprehensive loss and of stockholders' equity for the three and six months ended September 30, 2022 and 2021 and the consolidated statements of cash flows for the six months ended September 30, 2022 and 2021 are unaudited. The unaudited interim consolidated financial statements have been prepared on the same basis as the audited annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of the Company's financial position as of September 30, 2022 and the results of its operations for the three and six months ended September 30, 2022 and 2021 and its cash flows for the six months ended September 30, 2022 and 2021. The financial data and other information disclosed in these consolidated notes related to the three and six months ended September 30, 2022 and 2021 are unaudited. The results for the three and six months ended September 30, 2022 are not necessarily indicative of results to be expected for the year ending March 31, 2023, any other interim periods or any future year or period. The financial information included herein should be read in conjunction with the financial statements and notes in the Company's Annual Report on Form 10-K for the year ended March 31, 2022, which was filed with the Securities and Exchange Commission on May 19, 2022 (the "Annual Report").

During the three and six months ended September 30, 2022, there have been no changes to the Company's significant accounting policies as described in the Annual Report, except as described below.

Recently adopted accounting pronouncements

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments- Credit Losses (Topic 326).* The standard changes how entities will measure credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. Financial assets measured at amortized cost will be presented at the net amount expected to be collected by using an allowance for credit losses. The Company adopted ASU 2016-13 as of April 1, 2022. The adoption of ASU 2016-13 did not have a material impact on the Company's consolidated financial statements.

3. Fair value of financial assets and liabilities

The following tables present information about the Company's financial assets and liabilities measured at fair value on a recurring basis:

	Fair Value Measurements as of September 30, 2022 Using:			
	Level 1	Level 2	Level 3	Total
Assets				
Money market funds	$ —	$ 43,170	$ —	$ 43,170
US Government Agency bonds	—	46,944	—	46,944
US Treasury bonds	—	235,946	—	235,946
	$ —	$ 326,060	$ —	$ 326,060

	Fair Value Measurements as of March 31, 2022 Using:			
	Level 1	Level 2	Level 3	Total
Assets				
Money market funds	$ —	$ 75,117	$ —	$ 75,117
US Government Agency bonds	—	26,688	—	26,688
US Treasury bonds	—	263,019	—	263,019
	$ —	$ 364,824	$ —	$ 364,824

The underlying securities in the money market funds held by the Company are all government backed securities.

During the three and six months ended September 30, 2022 and 2021, there were no transfers between levels.

Valuation of cash equivalents and short-term investments

Money market funds, U.S. Government Agency bonds and U.S. Treasury bonds were valued by the Company using quoted prices in active markets for similar securities, which represent a Level 2 measurement within the fair value hierarchy. Cash equivalents consisted of money market funds at September 30, 2022 and March 31, 2022.

4. Short-term investments

As of September 30, 2022 and March 31, 2022, the Company's available-for-sale investments by type consisted of the following:

	September 30, 2022				
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Credit Losses	Fair value
US Government agency bonds	$ 47,268	$ 1	$ (325)	$ —	$ 46,944
US Treasury bonds	237,067	5	(1,126)	—	235,946
Total	$ 284,335	$ 6	$ (1,451)	$ —	$ 282,890

	March 31, 2022				
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Credit Losses	Fair value
US Government agency bonds	26,827	—	(139)	$ —	26,688
US Treasury bonds	264,162	—	(1,143)	—	263,019
Total	$ 290,989	$ —	$ (1,282)	$ —	$ 289,707

As of September 30, 2022, available-for-sale securities consisted of investments that mature within one year. As of March 31, 2022, available-for-sale securities consisted of investments that mature within one year, with the exception of certain U.S. Government agency bonds and U.S. Treasury bonds which had maturities between one and two years and an aggregate fair value of $7.6 million.

5. Property, plant and equipment, net

Property, plant and equipment, net consisted of the following:

	September 30, 2022	March 31, 2022
Office equipment	$ 995	$ 937
Computer equipment	1,893	1,667
Plant and laboratory equipment	8,285	7,720
Leasehold improvements	1,696	785
Construction in progress	1,073	1,619
Total property, plant and equipment	13,942	12,728
Less: Accumulated depreciation	(6,032)	(4,795)
Property, plant and equipment, net	$ 7,910	$ 7,933

Depreciation expense was $617 and $1,237 for the three and six months ended September 30, 2022 and $532 and $1,050 for the three and six months ended September 30, 2021, respectively. Depreciation expense is recorded within research and development and selling, general and administrative expenses in the consolidated statement of operations.

6. Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following:

	September 30, 2022	March 31, 2022
Accrued research and development costs	$ 8,224	$ 5,882
Accrued compensation and benefits costs	4,439	5,569
Accrued professional fees	760	621
Other	2,516	1,320
Total accrued expenses and other current liabilities	$ 15,939	$ 13,392

7. Stockholders' equity

Common stock

As of September 30, 2022 and March 31, 2022, the Company's certificate of incorporation, as amended and restated, authorized the Company to issue up to 150,000,000 shares of common stock, par value $0.001 per share.

As of September 30, 2022 and March 31, 2022, the Company had reserved 18,862,638 and 16,605,804 shares of common stock for the exercise of outstanding stock options and the vesting of restricted share units, the number of shares remaining available for grant under the Company's 2018 Omnibus Incentive Compensation Plan and the Company's Employee Stock Purchase Plan (see Note 8) and the exercise of the outstanding warrants to purchase shares of common stock, respectively.

Undesignated preferred stock

As of September 30, 2022, the Company's certificate of incorporation, as amended and restated, authorized the Company to issue up to 10,000,000 shares of undesignated preferred stock, par value $0.001 per share. There were no undesignated preferred shares issued or outstanding as of September 30, 2022.

ATM program

On August 11, 2020, the Company and the SVB Leerink LLC (the "Agent") entered into a sales agreement, which was subsequently amended on October 21, 2020 (as amended, the "2020 Sales Agreement"), pursuant to which the Company could sell, from time to time, at its option, up to an aggregate of $62.5 million of shares of the Company's common stock, $0.001 par value per share, through the Agent, as the Company's sales agent.

During the six months ended September 30, 2022, the Company settled transactions that occurred pursuant to the 2020 Sales Agreement, whereby the Company issued and sold an aggregate of 1,686,438 shares of its common stock, resulting in gross proceeds of $32.0 million, before deducting fees of $1.0 million. The Company did not issue or sell any shares under the 2020 Sales Agreement during the six months ended September 30, 2021.

On June 23, 2022, the 2020 Sales Agreement was terminated by the execution by the Company and the Agent of a new sales agreement (the "2022 Sales Agreement"). Under the 2022 Sales Agreement, the Company may sell, from time to time, at its option, up to an aggregate of $100.0 million of shares of the Company's common stock, $0.001 par value per share (the "Shares"), through the Agent, as the Company's sales agent.

Any Shares to be offered and sold under the 2022 Sales Agreement will be issued and sold (i) by methods deemed to be an "at the market offering" ("ATM") as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or if authorized by the Company, in negotiated transactions or block trades, and (ii) pursuant to a registration statement on Form S-3 filed by the Company with the Securities and Exchange Commission on June 23, 2022 for an offering of up to $400.0 million of various securities, including shares of the Company's common stock, preferred stock, debt securities, warrants and/or units for sale to the public in one or more public offerings.

Subject to the terms of the 2022 Sales Agreement, the Agent will use reasonable efforts to sell the Shares from time to time, based upon the Company's instructions (including any price, time or size limits or other customary parameters or conditions the Company may impose). The Company will pay the Agent a commission of up to 3.0% of the gross proceeds from the sale of the Shares. The Company has also agreed to provide the Agent with customary indemnification rights.

During the three months ended September 30, 2022, pursuant to the 2022 Sales Agreement, the Company issued and sold an aggregate of 340,000 shares of its common stock, resulting in gross proceeds of $6.7 million, before deducting fees of $0.2 million. The Company cannot provide any assurances that it will issue any additional Shares pursuant to the 2022 Sales Agreement.

Equity offerings

In June 2020, the Company completed a public offering of (a) 3,478,261 shares of the Company's common stock (the "June 2020 Shares"), inclusive of the June 2020 Underwriters fully exercised 30-day option to purchase 652,173 shares of the Company's common stock at a public offering price of $23.00 per share, and (b) pre-funded warrants to purchase 1,521,738 shares of the Company's common stock at a public offering price of $22.9999 per warrant. The Company received aggregate net proceeds of approximately $107,782 after deducting underwriting discounts, commissions and other offering expenses payable by the Company of approximately $7,217.

In October 2020, the Company completed a public offering of (a) 5,625,000 shares of the Company's common stock, inclusive of the underwriters 30-day option to purchase up to an additional 937,500 shares of the Company's common stock, at a public offering price of $40.00 per share and (b) pre-funded warrants to purchase 1,562,500 shares of the Company's common stock at a public offering price of $39.9999 per warrant. The Company received aggregate net proceeds of approximately $269,975 after deducting underwriting discounts, commissions and other offering expenses payable by the Company of approximately $17,525.

The pre-funded warrants described above are exercisable at any time after the date of issuance. Unless otherwise modified by a holder of a pre-funded warrant, no holder may exercise a pre-funded warrant if such holder, together with its affiliates, would beneficially own more than 9.99% of the number of shares of the Company's common stock outstanding immediately after giving effect to such exercise. A holder of a pre-funded warrant may increase or decrease this percentage up to 19.99% by providing at least 61 days' prior notice to the Company. Certain holders have decreased the 9.99% threshold to a 4.99% threshold.

Other than as set forth in Note 8 and Note 9 to these consolidated financial statements, the 3,084,238 shares of the Company's common stock underlying the above described pre-funded warrants, and the 2,200,000 shares of the Company's common stock underlying pre-funded warrants that were issued by the Company in 2019, are not included in the number of issued and outstanding shares of the Company's common stock set forth herein. As of September 30, 2022, no pre-funded warrants had been exercised.

8. Stock-based compensation

Stock-based compensation expense

Stock-based compensation expense was classified in the consolidated statements of operations as follows:

	Three Months Ended September 30,		Six Months Ended September 30,	
	2022	2021	2022	2021
Research and development	$ 2,529	$ 2,227	$ 5,143	$ 4,685
Selling, general and administrative	4,463	4,086	9,043	7,878
	$ 6,992	$ 6,313	$ 14,186	$ 12,563

The following table summarizes stock-based compensation expense by award type for the three months ended September 30, 2022 and 2021:

	Three Months Ended September 30,		Six Months Ended September 30,	
	2022	2021	2022	2021
Stock options	$ 4,845	$ 5,093	$ 10,004	$ 10,268
Restricted stock units	2,147	1,220	4,182	2,295
	$ 6,992	$ 6,313	$ 14,186	$ 12,563

2015 Enterprise Management Incentive Share Option Plan

The 2015 Enterprise Management Incentive Share Option Plan of Replimune UK (the “2015 Plan”) provided for Replimune UK to grant incentive stock options, non-statutory stock options, stock awards, stock units, stock appreciation rights and other stock-based awards. Incentive stock options were granted under the 2015 Plan only to the Company’s employees, including officers and directors who were also employees. Non-statutory stock options were granted under the 2015 Plan to employees, members of the board of directors, outside advisors and consultants of the Company.

2017 Equity Compensation Plan

In July 2017, in conjunction with reorganization by Replimune Limited, pursuant to which each shareholder thereof exchanged their outstanding shares in Replimune Limited for shares in Replimune Group, Inc., on a one-for-one basis (the "Reorganization"), the 2015 Plan was terminated, and all awards were cancelled with replacement awards issued under the 2017 Equity Compensation Plan (the “2017 Plan”). Subsequent to the Reorganization, no additional grants have been or will be made under the 2015 Plan and any outstanding awards under the 2015 Plan have continued, and will continue with their original terms. The Company concluded that the cancellation of the 2015 Plan and issuance of replacement awards under the 2017 Plan was a modification with no change in the material rights and preferences and therefore no recorded change in the fair value of each respective award.

The Company’s 2017 Plan provides for the Company to grant incentive stock options or non-statutory stock options, stock awards, stock units, stock appreciation rights and other stock-based awards. Incentive stock options were granted under the 2017 Plan only to the Company’s employees, including officers and directors who were also employees. Restricted stock awards and non-statutory stock options were granted under the 2017 Plan to employees, officers, members of the board of directors, advisors and consultants of the Company. The maximum number of common shares that may be issued under the 2017 Plan was 2,659,885, of which none remained available for future grants as of September 30, 2022. Shares with respect to which awards have expired, terminated, surrendered or cancelled under the 2017 Plan without having been fully exercised will be available for future awards under the 2018 Plan referenced below. In addition, shares of common stock that are tendered to the Company by a participant to exercise an award are added to the number of shares of common stock available for the grant of awards.

2018 Omnibus Incentive Compensation Plan

On July 9, 2018, the Company’s board of directors adopted, and the Company’s stockholders approved the 2018 Omnibus Incentive Compensation Plan (the “2018 Plan”), which became effective immediately prior to the effectiveness of the registration statement filed in connection with the Company’s initial public offering. The 2018 Plan provides for the issuance of incentive stock options, non-qualified stock options, stock awards, stock units, stock appreciation rights and other stock-based

awards. The number of shares of common stock initially reserved for issuance under the 2018 Plan is 3,617,968 shares. If any options or stock appreciation rights, including outstanding options and stock appreciation rights granted under the 2017 Plan (up to 2,520,247 shares), terminate, expire, or are canceled, forfeited, exchanged, or surrendered without having been exercised, or if any stock awards, stock units or other stock-based awards, including outstanding awards granted under the 2017 Plan, are forfeited, terminated, or otherwise not paid in full in shares of common stock, the shares of the Company's common stock subject to such grants will be available for purposes of the 2018 Plan. The number of shares reserved for issuance under the 2018 Plan will increase automatically on the first day of each April equal to 4.0% of the total number of shares of common stock outstanding on the last trading day in the immediately preceding fiscal year, which includes for these purposes, the 5,284,238 shares issuable upon exercise of those pre-funded warrants described in Note 7 to these consolidated financial statements, or such lesser amount as determined by the Board. On April 1, 2022, the number of shares reserved for issuance under the 2018 Plan automatically increased by 2,104,915 shares pursuant to the terms of the 2018 Plan and based on total number of shares of common stock outstanding on March 31, 2022. On April 1, 2021, the number of shares reserved for issuance under the 2018 Plan automatically increased by 2,074,028 shares pursuant to the terms of the 2018 Plan. As of September 30, 2022, 2,327,646 shares remained available for future grants under the 2018 Plan.

The 2015 Plan, the 2017 Plan and the 2018 Plan are administered by the board of directors or, at the discretion of the board of directors, by a committee of the board of directors. However, the board of directors shall administer and approve all grants made to non-employee directors. The exercise prices, vesting and other restrictions are determined at the discretion of the board of directors, except that the exercise price per share of incentive stock options may not be less than 100% of the fair market value of the common stock on the date of grant (or 110% of fair value in the case of an award granted to employees who hold more than 10% of the total combined voting power of all classes of stock at the time of grant) and the term of stock options may not be greater than five years for an incentive stock option granted to a 10% stockholder and greater than ten years for all other options granted. Stock options awarded under both plans expire ten years after the grant date, unless the board of directors sets a shorter term. Vesting periods for the plans are determined at the discretion of the board of directors. Incentive stock options granted to employees and non-statutory options granted to employees, officers, members of the board of directors, advisors, and consultants of the Company typically vest over four years. In 2021 the board of directors initiated the award of restricted stock units ("RSUs"), under the 2018 Plan in addition to stock option awards available as part of the Company's equity incentive for employees, officers, advisors and consultants of the Company. The RSUs typically vest over four approximately equal annual installments with the first such installment occurring on a designated vesting date that is approximately on the one year anniversary of the date of grant and the subsequent installments occurring on the subsequent three annual anniversaries of the designated vesting date.

Employee Stock Purchase Plan

On July 9, 2018, the Company's board of directors adopted and the Company's stockholders approved the Employee Stock Purchase Plan (the "ESPP"), which became effective immediately prior to the effectiveness of the registration statement that was filed in connection with the Company's IPO. The total shares of common stock initially reserved for issuance under the ESPP is 348,612 shares. In addition, as of the first trading day of each fiscal year during the term of the ESPP (excluding any extensions), an additional number of shares of the Company's common stock equal to 1% of the total number of shares outstanding on the last trading day in the immediately preceding fiscal year, which includes for these purposes, the 5,284,238 shares issuable upon exercise of those pre-funded warrants described in Note 7 to these consolidated financial statements, or 697,224 shares, whichever is less (or such lesser amount as determined by the Company's board of directors) will be added to the number of shares authorized under the ESPP. In accordance with the terms of the ESPP, on April 1, 2022 and 2021, the number of shares reserved for issuance under the ESPP automatically increased by 526,228 and 518,507 shares respectively, for a total of 2,076,603 shares reserved for the ESPP. If the total number of shares of common stock to be purchased pursuant to outstanding purchase rights on any particular date exceed the number of shares then available for issuance under the ESPP, then the plan administrator will allocate the available shares pro-rata and refund any excess payroll deductions or other contributions to participants. The Company's ESPP is not currently active.

Out-of-Plan Inducement Grant

In May 2021, the Company granted an equity award to a newly hired executive as a material inducement to enter into employment with the Company. The grant constitutes an "employment inducement grant" in accordance with Rule 5635(c)(4) of the Nasdaq Listing Rules and was issued outside of the 2018 Plan and each of the other stock incentive plans described above. The inducement grant included a nonqualified stock option to purchase up to 125,000 shares of the Company's common stock, as well as a restricted stock unit grant representing 88,333 shares of the Company's common stock. These stock option and restricted stock unit inducement grants have terms and conditions consistent with those set forth under the 2018 Plan and vest under the same respective vesting schedules as stock option and restricted stock unit awards granted under the 2018 Plan. The inducement grant is included in the stock option and RSU award tables below.

Stock option valuation

The fair value of stock option grants is estimated using the Black-Scholes option-pricing model. As the Company has limited company-specific historical and implied volatility information, the expected stock volatility is based on a combination of Replimune volatility and the historical volatility of a publicly traded set of peer companies. For options with service-based vesting conditions, the expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. The expected term of stock options granted to non-employees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future.

The following table presents, on a weighted-average basis, the assumptions that the Company used to determine the grant-date fair value of stock options granted to employees and directors:

	Three Months Ended September 30,		Six Months Ended September 30,	
	2022	2021	2022	2021
Risk-free interest rate	3.08 %	0.96 %	2.61 %	1.11 %
Expected term (in years)	6.1	6.1	6.0	6.0
Expected volatility	74.5 %	79.4 %	75.5 %	80.2 %
Expected dividend yield	0 %	0 %	0 %	0 %

Stock options

The following table summarizes the Company's stock option activity:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding as of March 31, 2022	6,514,334	$ 16.78	7.26	$ 30,358
Granted	1,325,894	$ 18.15		
Exercised	(212,280)	$ 12.58		
Cancelled	(214,482)	$ 22.30		
Outstanding as of September 30, 2022	7,413,466	$ 16.98	7.31	$ 30,477
Options exercisable as of March 31, 2022	3,645,749	$ 10.85	6.31	$ 24,875
Options exercisable as of September 30, 2022	4,291,654	$ 13.50	6.31	$ 26,428

As of September 30, 2022, there was $41.7 million of unrecognized compensation cost related to unvested common stock options, which is expected to be recognized over a weighted average period of 2.5 years.

The weighted average grant-date fair value of stock options granted during the six months ended September 30, 2022 and 2021 was $12.20 and $22.25, respectively. The aggregate intrinsic value of stock options exercised during the six months ended September 30, 2022 was $1.2 million.

Restricted stock units

A summary of the changes in the Company's RSUs during the three months ended September 30, 2022 is as follows:

	Number of Restricted Shares	Weighted Average Grant Date Fair Value
Outstanding as of March 31, 2022	826,213	31.38
Granted	657,142	18.11
Vested	(162,029)	32.82
Cancelled	(57,985)	27.12
Outstanding as of September 30, 2022	1,263,341	24.49

As of September 30, 2022, there was $27.1 million of unrecognized compensation cost related to unvested restricted stock units, which is expected to be recognized over a weighted average period of 3.2 years. As of September 30, 2021, there was $20.7 million unrecognized compensation cost related to unvested restricted stock units.

9. Net loss per share

Basic and diluted net loss per share attributable to common stockholders was calculated as follows:

	Three Months Ended September 30,		Six Months Ended September 30,	
	2022	2021	2022	2021
Numerator:				
Net loss	$ (43,102)	$ (29,355)	$ (85,355)	$ (56,666)
Denominator:				
Weighted average common shares outstanding, basic and diluted	54,770,291	52,081,325	54,492,395	51,962,795
Net loss per share, basic and diluted	$ (0.79)	$ (0.56)	$ (1.57)	$ (1.09)

The 5,284,238 share of the Company's common stock issuable upon exercise of the November 2019 Pre-Funded Warrants, the June 2020 Pre-Funded Warrants and the October 2020 Pre-Funded Warrants described in Note 7 to these consolidated financial statements are included as outstanding common stock in the calculation of basic and diluted net loss per share.

The Company’s potentially dilutive securities, which include stock options and warrants to purchase common stock have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share for the periods indicated because including them would have had an anti-dilutive effect:

	Three and Six Months Ended September 30,	
	2022	2021
Options to purchase common stock	7,413,466	6,998,097
Warrants to purchase common stock	497,344	497,344
	7,910,810	7,495,441

10. Significant agreements

Agreement with Bristol-Myers Squibb Company

In February 2018, the Company entered into an agreement with Bristol-Myers Squibb Company ("BMS"). Pursuant to the agreement, BMS will provide to the Company, at no cost, a compound for use in the Company's ongoing clinical trial of RP1. Under the agreement, the Company will sponsor, fund and conduct the clinical trial in accordance with an agreed-upon protocol. BMS granted the Company a non-exclusive, non-transferrable, royalty-free license (with a right to sublicense) under its intellectual property to its compound in the clinical trial and agreed to supply its compound, at no cost to the Company, for use in the clinical trial. In January 2020, this agreement was expanded to cover an additional cohort of 125 patients with anti-PD-1 failed melanoma.

Unless earlier terminated, the agreement will remain in effect until (i) the completion of the clinical trial, (ii) all related clinical trial data have been delivered to both parties and (iii) the completion of any statistical analyses and bioanalyses contemplated by the clinical trial protocol or any analysis otherwise agreed upon by the parties. The agreement may be terminated by either party (x) in the event of an uncured material breach by the other party, (y) in the event the other party is insolvent or in bankruptcy proceedings or (z) for safety reasons. Upon termination, the licenses granted to the Company to use BMS's compound in the clinical trial will terminate.

In April 2019, the Company entered into a separate agreement with BMS on terms similar to the terms set forth in the agreement described above, pursuant to which BMS will provide to the Company, at no cost, nivolumab for use in the Company's Phase 1 clinical trial of RP2 in combination with nivolumab.

Agreement with Regeneron Pharmaceuticals, Inc.

In May 2018, the Company entered into an agreement with Regeneron Pharmaceuticals, Inc. ("Regeneron"). The Company and Regeneron are each independently developing compounds for the treatment of certain tumor types. Pursuant to the agreement, the Company and Regeneron will undertake one or more clinical trials using a combination of the compounds being developed by each entity. Under the agreement, each clinical trial will be conducted under terms set out in a separately agreed upon study plan that will identify the name of the sponsor and which party will manage the particular clinical trial, and include the protocol, the budget and a schedule of clinical obligations. In June 2018, under the terms of the agreement between the Company and Regeneron, the parties agreed to the first study plan. The Company and Regeneron have agreed to the protocol, budget, sample testing and clinical obligations schedule under the study plan. Development and supply costs associated with the first study plan will be split equally between the Company and Regeneron.

Pursuant to the terms of the agreement, each party granted the other party a non-exclusive license under its respective intellectual property and agreed to contribute the necessary resources needed to fulfill its respective obligations, in each case, under the terms of the agreed-upon or to-be agreed upon study plans. Development costs of a particular clinical trial will be split equally between the Company and Regeneron in accordance with the agreed upon study plan.

The agreement may be terminated by either party if (i) there is no active study plan for which a final study report has not been completed and the parties have not entered into a study plan for an additional clinical trial within a period of time after the delivery of the most recent final study report or (ii) in the event of a material breach.

The agreement with Regeneron is accounted for under ASC 808, *Collaborative Arrangements* ("ASC 808"), as both parties are active participants and each party pays its own compound costs and shares equally in development costs in accordance with and up to the amount in the agreed upon first study plan. The Company will account for costs incurred as part of the study, including costs to supply compounds for use in the study, as research and development expenses within the consolidated statement of operations. The Company will recognize any amounts received from Regeneron in connection with this agreement as an offset to research and development expense within the consolidated statement of operations.

Under the terms of the agreement, on a quarterly basis the Company and Regeneron true-up costs of the study and make corresponding payments to the party that incurred the majority of the costs up to the amount in the study plan or modified version thereof agreed by the Joint Development Committee established to govern the collaboration. In July 2022, Regeneron informed the Company that the costs of the study have reached the initial budget for the initial study plan of June 2018 and that Regeneron's reimbursement of CERPASS study costs to the Company have completed in the period ending June 30, 2022 in relation to the initial study budget. The Company and Regeneron are in communication regarding receiving Regeneron's acknowledgement of the sharing of the study costs according to the current budget that superseded that of the initial study plan and initial budget. As a result of this notice from, and the ongoing communications with, Regeneron, the Company has not recorded any cost-sharing reimbursements from Regeneron in prepaid expenses and other current assets in the consolidated balance sheet or as an offset to research and development expense within the consolidated statement of operations since Regeneron informed the Company that Regeneron's reimbursement of CERPASS study costs to the Company have completed.

During the six months ended September 30, 2022 and 2021, the Company recorded $1.1 million and $2.9 million, respectively as an offset to research and development expenses. During the three and six months ended September 30, 2022 and 2021, the Company did not make any payments to Regeneron under the terms of the agreement. During the six months ended September 30, 2022 and 2021, the Company received payments under the terms of the agreement from Regeneron of $2.0 million and $2.7 million, respectively. As of September 30, 2022 and March 31, 2022, the Company had a balance of $1.1 million and $2.0 million of receivables from Regeneron in connection with this agreement in prepaid expenses and other current assets in the consolidated balance sheet, respectively.

11. Commitments and contingencies

Leases

The table below presents the lease-related assets and liabilities recorded on the consolidated balance sheet as of September 30, 2022:

	Three Months Ended September 30,		Six Months Ended September 30,	
	2022	**2021**	**2022**	**2021**
Lease cost				
Finance lease costs:				
Amortization of right-to-use asset	$ 607	$ 607	$ 1,214	$ 1,214
Interest on lease liabilities	550	557	1,102	1,115
Operating lease costs	252	245	511	487
Total lease cost	$ 1,409	$ 1,409	$ 2,827	$ 2,816

The following table summarizes the classification of lease costs in the consolidated statement of operations for the three months ended September 30, 2022 and 2021 as follows:

	Three Months Ended September 30,		Six Months Ended September 30,	
	2022	**2021**	**2022**	**2021**
Finance Lease Costs				
Research and development	$ 518	$ 518	$ 1,035	$ 1,035
Selling, general and administrative	89	89	179	179
Other income (expense)	550	557	1,102	1,115
Operating Lease Costs				
Research and development	103	95	213	189
Selling, general and administrative	149	150	298	298
Total lease cost	$ 1,409	$ 1,409	$ 2,827	$ 2,816

The following table summarizes the maturity of the Company's lease liabilities on an undiscounted cash flow basis and a reconciliation to the operating and financing lease liabilities recognized on its balance sheet as of September 30, 2022:

	September 30, 2022		
	Operating leases	Financing lease	Total
2023 (remaining six months)	$ 500	$ 1,297	$ 1,797
2024	1,007	2,639	3,646
2025	1,016	2,718	3,734
2026	1,026	2,799	3,825
2027	997	2,883	3,880
Thereafter	2,755	38,022	40,777
Total lease payments	7,301	50,358	57,659
Less: interest	2,019	23,552	25,571
Total lease liabilities	$ 5,282	$ 26,806	$ 32,088

The following table provides lease disclosure as of September 30, 2022 and March 31, 2022:

	September 30, 2022	March 31, 2022
Leases		
Right-to-use operating lease asset	$ 4,984	$ 5,552
Right-to-use finance lease asset	40,879	42,094
Total lease assets	$ 45,863	$ 47,646
Operating lease liabilities, current	$ 1,002	$ 1,070
Finance lease liabilities, current	2,600	2,562
Operating lease liabilities, non-current	4,280	4,801
Finance lease liabilities, non-current	24,206	24,406
Total lease liabilities	$ 32,088	$ 32,839

The following table provides lease disclosure for the three months ended September 30, 2022 and 2021:

	Six Months Ended September 30,			
	2022		2021	
Other information				
Cash paid for amounts included in the measurement of lease liabilities:				
Operating cash flows from operating leases	$ 466		$ 487	
Operating cash flows from finance leases	$ 1,102		$ 1,115	
Financing cash flows from finance leases	$ 163		$ 114	
Weighted-average remaining lease term - operating leases	7.1	years	8.3	years
Weighted-average remaining lease term - financing leases	16.8	years	17.8	years
Weighted-average discount rate - operating leases	9.8 %		9.8 %	
Weighted-average discount rate - financing leases	8.3 %		8.3 %	

The variable lease costs and short-term lease costs were insignificant for three and six months ended September 30, 2022 and 2021.

Manufacturing commitments

The Company has entered into an agreement with a contract manufacturing organization to provide clinical trial products. As of September 30, 2022 and March 31, 2022, the Company had committed to minimum payments under these arrangements totaling $1,209 and $1,951, respectively.

Indemnification agreements

In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with members of its executive management team and its board of directors that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. To date, the Company has not incurred any material costs as a result of such indemnifications. The Company is not aware of any claims under indemnification arrangements, and therefore it has not accrued any liabilities related to such obligations in its consolidated financial statements as of September 30, 2022 or March 31, 2022.

Legal proceedings

The Company is not a party to any litigation and does not have contingency reserves established for any litigation liabilities.

12. Geographic information

The Company operates in two geographic regions: the United States (Massachusetts) and the United Kingdom (Oxfordshire). Information about the Company's long-lived assets held in different geographic regions is presented in the tables below:

	September 30, 2022	March 31, 2022
United States	$ 6,188	$ 6,318
United Kingdom	1,722	1,615
	$ 7,910	$ 7,933

13. Subsequent Events

On October 6, 2022 (the "Closing Date"), the Company entered into a Loan and Security Agreement (the "Loan Agreement") with Hercules Capital, Inc. ("Hercules"), in its capacity as administrative agent and collateral agent (the "Agent") and as a lender, and certain other financial institutions that from time to time may become parties to the Loan Agreement as lenders (collectively, the "Lenders"). The Loan Agreement provides for term loans in an aggregate principal amount of up to $200.0 million under multiple tranches (the "Term Loan Facility"), available to be drawn during the specified time period at the Company's option, which includes (i) an initial term loan advance of $30.0 million on the Closing Date with an additional $30.0 million available to be drawn on or prior to September 30, 2023, (ii) subject to the Company achieving certain performance milestones, additional term loan advances in an aggregate principal amount of up to $115.0 million during the term of the Term Loan Facility, and (iii) subject to approval by the applicable Lenders' investment committees in their discretion, up to two term loan advances in an aggregate principal amount of up to $25.0 million, on or prior to the end of the interest-only period referred to below. The Company has agreed to use the proceeds of the Term Loan Facility for working capital and general corporate purposes.

The Term Loan Facility will mature on October 1, 2027 (the "Maturity Date"). The outstanding principal balance of the Term Loan Facility bears interest payable in cash at a floating rate per annum equal to the greater of (i) 7.25% and (ii) the sum of the Prime Rate (which is capped at 7.25%) and 1.75%. In addition, the principal balance of the Term Loan Facility will bear "payment-in-kind" interest at the rate of 1.50% ("PIK Interest"), which PIK Interest will be added to the outstanding principal balance of the Term Loan Facility on each interest payment date. Accrued interest is payable monthly following the funding of each term loan advance.

The Company may make payments of interest only, without any loan amortization payments, for a period of forty-eight (48) months following the Closing Date, which interest-only period may be extended to (i) the date which is fifty-four (54) months following the Closing Date if certain performance milestones have been achieved, and (ii) the Maturity Date if certain additional performance milestones have been achieved. At the end of the interest-only period, the Company is required

to begin repayment of the outstanding principal of the Term Loan Facility in equal monthly installments (or, in a single installment, if the interest-only period has been extended to the Maturity Date).

The Loan Agreement contains customary facility fees, events of default and representations, warranties and affirmative and negative covenants, including a financial covenant requiring us to maintain certain levels of cash in accounts subject to a control agreement in favor of the Agent (the "Unrestricted Cash") at all times commencing on January 1, 2024. In addition, the Loan Agreement also contains a financial covenant that beginning on the later of (i) July 1, 2024 and (ii) the date on which the aggregate outstanding principal amount of the Term Loan Facility is equal to or greater than $100.0 million, the Company is required to satisfy one of the following requirements: (1) achieve a minimum amount of trailing three-month net product revenue tested on a monthly basis, (2) maintain a market capitalization in excess of $1.2 billion and Unrestricted Cash in an amount no less than 50% of the outstanding amount under the Term Loan Facility, or (3) maintain Unrestricted Cash in an amount no less than 85% of the outstanding amount under the Term Loan Facility.

Item 2. Management's discussion and analysis of financial condition and results of operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our unaudited consolidated financial statements and related notes appearing in Part I, Item 1 of this Quarterly Report on Form 10-Q, or this Quarterly Report, and with our audited consolidated financial statements and notes thereto for the year ended March 31, 2022, included in our Annual Report on Form 10-K for the fiscal year ended March 31, 2022.

In addition to historical information, some of the statements contained in this discussion and analysis or set forth elsewhere in this Quarterly Report, including information with respect to our plans and strategy for our business, constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. We have based these forward-looking statements on our current expectations and projections about future events. The following information and any forward-looking statements should be considered in light of factors discussed elsewhere in this Quarterly Report, particularly including those risks identified in Part II, Item 1A "Risk Factors" and our other filings with the Securities Exchange Commission, or SEC.

We caution you that forward-looking statements are not guarantees of future performance and that our actual results of operations, financial condition and liquidity, and the development of the industry in which we operate may differ materially from the forward-looking statements contained in this Quarterly Report. Statements made herein are as of the date of the filing of this Quarterly Report with the SEC and should not be relied upon as of any subsequent date. Even if our results of operations, financial condition and liquidity, and the development of the industry in which we operate are consistent with the forward-looking statements contained in this Quarterly Report, they may not be predictive of results or developments in future periods. We disclaim any obligation, except as specifically required by law and the rules of the SEC, to publicly update or revise any such statements to reflect any change in our expectations or in events, conditions or circumstances on which any such statements may be based or that may affect the likelihood that actual results will differ from those set forth in the forward-looking statements.

Overview

General

We are a clinical-stage biotechnology company committed to applying our leading expertise in the field of oncolytic immunotherapy to transform the lives of cancer patients through our novel tumor-directed oncolytic immunotherapies. Our proprietary tumor-directed oncolytic immunotherapy product candidates are designed and intended to maximally activate the immune system against cancer.

Oncolytic immunotherapy is an emerging drug class, which we intend to establish as the second cornerstone of immune-based cancer treatments, alongside checkpoint blockade. Oncolytic immunotherapy exploits the ability of certain viruses to selectively replicate in and directly kill tumors, as well as induce a potent, patient-specific, anti-tumor immune response. Our product candidates incorporate multiple mechanisms of action into a practical "off-the-shelf" approach that is intended to maximize the immune response against a patient's cancer and to offer significant advantages over other approaches to inducing anti-tumor immunity, including personalized vaccine approaches. We believe that the bundling of multiple approaches for the treatment of cancer into single therapies will increase clinical efficacy and simplify the development path of our product candidates, while also improving patient outcomes at a lower cost to the healthcare system than the use of multiple different drugs.

Our proprietary RPx platform is based on a proprietary, engineered strain of herpes simplex virus 1, or HSV-1, backbone with payloads added to maximize immunogenic cell death and the induction of a systemic anti-tumor immune response. The RPx platform has a dual local and systemic mechanism of action, or MOA, consisting of direct selective virus-mediated killing of the tumor resulting in the release of tumor-derived antigens and altering of the tumor microenvironment to ignite a strong and durable systemic response. This MOA is expected to be synergistic with most established and experimental cancer treatment modalities, and, with an attractive safety profile the RPx platform is expected to have the versatility to be developed alone or combined with a variety of other treatment options. We currently have three RPx product candidates in our development pipeline, RP1 (vusolimogene oderparepvec), our lead product candidate, RP2 and RP3. Although our fiscal year ends March 31st, our programs and program updates are reported on a calendar year basis.

We are conducting a number of clinical trials of RP1, both as a monotherapy and in combination with anti-PD-1 therapy, with a focus on immune-responsive tumors. We have completed enrolling patients in a randomized, controlled Phase-2 clinical trial of RP1 with cutaneous squamous cell carcinoma, or CSCC, RP1's lead indication, which is referred to herein as CERPASS or the CERPASS trial, under an agreement with our partner Regeneron. CERPASS is a registration directed clinical

trial evaluating RP1 in combination with cemiplimab, an anti-PD-1 therapy developed by Regeneron, versus cemiplimab alone. CERPASS enrolled 211 patients with locally advanced or metastatic CSCC who are naïve to anti-PD1 therapy. Topline primary analysis data from the CERPASS trial is expected to be released in the first half of 2023. The CERPASS trial will evaluate complete response, or CR rate, and overall response rate, or ORR, as its two primary efficacy endpoints as assessed by independent review, as well as duration of response, progression-free survival, or PFS, and overall survival, or OS, as secondary endpoints. Regeneron has granted to us a non-exclusive royalty-free license to cemiplimab for use in this trial, is funding one-half of the clinical trial costs up to the amount agreed in the first study plan, and is supplying cemiplimab at no cost. We are currently in communication with Regeneron regarding receiving Regeneron's acknowledgement of the sharing of the study costs according to the current budget that superseded that of the initial study plan and initial budget. If the CERPASS trial generates compelling clinical data demonstrating the benefits of the combined treatment, we believe the data could support a filing with regulatory authorities seeking marketing approval.

We continue our collaboration with Bristol Myers Squibb Company, or BMS, under which BMS has granted us a non-exclusive, royalty-free license to, and is supplying at no cost, its anti-PD-1 therapy, nivolumab, for use in combination with RP1 in a multi-cohort Phase 1/2 clinical trial which is referred to herein as IGNYTE, or the IGNYTE trial. There are four tumor specific cohorts currently enrolling in the IGNYTE trial including a registration directed Phase 2 expansion cohort enrolling 125 patients with anti-PD-1 failed cutaneous melanoma who are being treated with RP1 in combination with nivolumab. The additional three cohorts are in non-melanoma skin cancers, or NMSC, which includes patients with both naïve and anti-PD-1 failed disease, in anti-PD-1 failed microsatellite instability high, or MSI-H/dMMR tumors, and in anti-PD(L)-1 failed non-small cell lung cancer, or NSCLC.

We initiated the registration directed Phase 2 expansion cohort in the IGNYTE trial enrolling 125 patients with anti-PD-1 failed cutaneous melanoma after completing enrollment in a prior Phase 2 cohort in the same clinical trial of approximately 30 patients with melanoma, which demonstrated the tolerability and clinical activity of the combination of RP1 and nivolumab in patients with melanoma, including those who had failed prior anti-PD-1 when given alone or in combination with CTLA-4 blockade. In March 2021, we held a Type B meeting with the FDA to discuss the design of the 125 patient expansion cohort in the IGNYTE trial. In this meeting, the FDA expressed that while a randomized controlled clinical trial would always be preferred for registration purpose, that in this patient population with no clear standard of care, if the clinical data is sufficiently compelling then the data could be considered for submission by the FDA under the accelerated approval pathway. The FDA also indicated that a randomized confirmatory trial would also be needed as is required under the accelerated approval pathway. The design of the confirmatory trial is intended to be discussed with the FDA prior to a BLA submission. In March 2022, we released updated data showing that RP1 combined with nivolumab continues to demonstrate deep and durable responses in patients with melanoma, including a 37.5% overall response rate in anti-PD-1 failed disease. We recently reported that we have completed enrollment of the first 75 patients in this cohort of the IGNYTE trial and we continue to expect to release a data snapshot from these patients with six months follow-up in late 2022. The data snapshot from these first 75 patients will be investigator assessed as compared to the primary endpoint of ORR for all patients in this cohort which is to be assessed by central review. In order to document sufficient durability of response, an important secondary endpoint of the study, the primary analysis upon which a filing is intended to be made, is expected to be triggered 12 months following the last patient being enrolled.

We continue to enroll patients in our three additional IGNYTE Phase-2 cohorts under our collaboration with BMS in which we are evaluating RP1 in combination with nivolumab. In NMSC, enrollment in the anti-PD-1 naïve NMSC cohort has completed, included patients with cutaneous squamous cell carcinoma, or CSCC, basal cell carcinoma, or BCC, merkel cell carcinoma, or MCC, and angiosarcoma. Updated data from the CSCC patients in the anti-PD-1 naïve NMSC cohort, presented in March 2022, continued to show nearly half of the patients achieving a complete response and nearly 65% achieving a complete or partial response. We are currently enrolling 30 patients in an extension of the NMSC cohort of RP1 in combination with nivolumab in NMSC patients who have failed prior treatment with anti-PD(L)-1. In March 2022, we reported initial data from this extension cohort where responses had been observed in anti-PD(L)-1 failed CSCC, MCC and angiosarcoma tumors. We believe the activity of RP1 combined with nivolumab in this anti-PD(L)-1 failed cohort represents a new potential therapeutic option for these patients and supports the broad potential for RP1 in anti-PD(L)-1 failed disease beyond melanoma. Recruitment remains ongoing into the cohorts of patients with anti-PD1 failed NMSC, including CSCC, anti-PD1 failed NSCLC, and anti-PD1 failed MSI-H/dMMR cancers, with a data update expected in the first half of 2023.

We also have open for enrollment a Phase 1b/2 clinical trial of single agent RP1 in solid organ transplant recipients with skin cancers, including CSCC, which is referred to herein as ARTACUS or the ARTACUS trial, which we believe to be potentially registrational (in its own right or, subject to discussion with regulatory authorities, following enrollment of additional patients, including as a potential label expansion after an initial approval of RP1 in a different indication). We are currently enrolling up to 65 patients in the ARTACUS trial to assess the safety and efficacy of RP1 in liver and kidney transplant recipients with skin cancers. Enrollment in this clinical trial has been impacted by COVID-19, as the patient population is severely immune-compromised and considered very high risk. Even though the patient numbers are currently small, as reported in March 2022, we have observed responses in these patients with RP1as monotherapy with a similar safety

profile to that observed in our other RP1 clinical trials in patients who are not immune suppressed. Enrollment continues in the ARTACUS trial and we expect to provide a data update in the first half of 2023.

In addition to these ongoing trials with RP1, we are developing a protocol for testing RP1 along and combined with an anti-PD1 therapy for the neoadjuvant treatment of CSCC.

We are also developing additional product candidates, RP2 and RP3, that have been further engineered to enhance anti-tumor immune responses and are intended to address additional tumor types, including traditionally less immune responsive tumor types. In addition to the expression of GALV-GP R(-) and human GM-CSF as in RP1, RP2 has been engineered to express an antibody-like molecule intended to block the activity of CTLA-4, a protein that inhibits the full activation of an immune response, including to tumors. RP3 has been engineered with the intent to further stimulate an anti-tumor immune response through activation of immune co-stimulatory pathways through the additional expression of the ligands for CD40 and 4-1BBL, as well as anti-CTLA-4 and GALV-GP R(-), but without the expression of GM-CSF.

We initiated a Phase-1 clinical trial of RP2 alone and in combination with nivolumab in the second half of 2019. This clinical trial is also being conducted as part of our collaboration with BMS, under which BMS has granted us a non-exclusive, royalty-free license to, and will supply at no cost, nivolumab, for use in combination with RP2. In November 2020, we and BMS agreed to increase the number of patients in the combination part of the clinical trial from 12 to 30 patients. We have presented data from the single agent RP2 portion of this clinical trial that showed deep and durable responses, including demonstration of tumor response in uninjected lesions and in patients with difficult to treat advanced cancers. We believe that this data supports the hypothesis that anti-CTLA-4 delivered intra-tumorally through oncolytic virus replication, with accompanying antigen release and presentation, can provide potent anti-tumor effects. We have also presented combination data from both the clinical trial that showed compelling activity in patients with immune insensitive tumors and with anti-PD-1 failed disease. In the second half of 2021, we reported full enrollment in the initial 30 patient combination with nivolumab part of the Phase 1 clinical trial following which a protocol amendment was made to expand this clinical trial to enroll additional patients who are required to have specific tumor types of interest, including gastro-intestinal cancers, breast cancer, lung cancer, head and neck cancer and uveal melanoma, rather than any type of tumor as were eligible for the initial 30 patient group.

We have obtained clearance from the Medicines and Healthcare products Regulatory Agency in the United Kingdom to enter clinical development with RP3 and in December 2020 we initiated dosing in this clinical trial. This Phase 1 clinical trial is designed to evaluate RP3 alone and combined with anti-PD-1 therapy in advanced solid tumor patients. In March 2022, we reported initial data from the single agent monotherapy cohort of RP3 in superficial and deep tumors exploring two dose levels of RP3, including injections into deep tumors. The higher dose level has been confirmed as the recommended Phase 2 dose and no new safety signals have been observed as compared to RP1 or RP2. Enrollment of the combination part of this study has begun, combining RP3 with nivolumab under a collaboration and supply agreement with BMS. This cohort is focusing on enrolling patients with gastro-intestinal cancers, breast cancer, lung cancer and head and neck cancer.

We intend to initiate a Phase 2 development plan for RP2 and/or RP3 to target a range of tumor types with un-met need, including where liver tumors are common and in patients with early disease where the objective of treatment would be to increase the proportion of patients achieving cure. This includes the development of RP2 and/or RP3 in combination with the current standard of care, including immunotherapy, chemotherapy and radiation, and in settings following the current standard of care. We are planning for initial signal finding single arm Phase 2 clinical trials in the following tumor types: squamous cell carcinoma of the head and neck, or SCCHN, locally advanced and recurrent/metastatic; hepatocellular carcinoma, or HCC, both first and second line; and colorectal cancer, or CRC, third line; with additional signal finding studies intended to follow. We now expect to initiate this Phase 2 development work in the first half of 2023.

We expect to provide an update on our RP2 and RP3 programs before year-end 2022.

RP1, RP2 and RP3 are administered by direct injection into solid tumors, guided either visually or by ultrasound, computerized tomography, or CT, or other imaging methods. We believe that direct injection maximizes virus-mediated tumor cell death, provides the most efficient delivery of virus-encoded immune activating proteins into the tumor with the goal of activating systemic immunity, and limits the systemic toxicities that could be associated with intravenous administration. Activation of systemic immunity through local administration is intended to lead to the induction of anti-tumor immune responses leading to clinical response of tumors that have not themselves been injected.

Financial

Since our inception, we have devoted substantially all of our resources to developing our proprietary RPx platform, building our intellectual property portfolio, conducting research and development of our product candidates, business planning, raising capital and providing general and administrative support for our operations. To date, we have incurred significant

operating losses and we have financed our operations primarily with proceeds from the sale of equity securities and to a lesser extent, the proceeds from the issuance of debt securities. Our ability to generate product revenue sufficient to achieve profitability will depend on the successful development and eventual commercialization of one or more of our product candidates. We do not have any products approved for sale and have not generated any revenue from product sales.

Since our initial public offering, or IPO, on July 20, 2018, we have raised an aggregate of approximately $606.5 million in net proceeds to fund our operations, of which $101.2 million was from our IPO, $463.4 million was from three separate follow-on offerings, or the Public Offerings, that we closed in November 2019, June 2020 and October 2020, respectively, and $41.9 million was from at-the-market offerings. We sold 7,407,936 shares of common stock in our IPO, an aggregate of 13,619,822 shares of our common stock and pre-funded warrants to purchase 5,284,238 shares of common stock in the Public Offerings, and 2,313,997 shares of common stock through our at-the-market facilities.

Our net losses were $43.1 million and $29.4 million for the three months ended September 30, 2022 and 2021, respectively. As of September 30, 2022, we had an accumulated deficit of $396.6 million. These losses have resulted primarily from costs incurred in connection with research and development activities and general and administrative costs associated with our operations. We expect to continue to incur significant expenses and increasing operating losses for at least the next several years.

We anticipate that our expenses and capital requirements will increase substantially in connection with our ongoing activities, particularly as we advance the preclinical activities and clinical trials of our product candidates, and if and as we:

- conduct our current and future clinical trials with RP1, RP2 and RP3;
- further preclinical development of our platform;
- operate our in-house manufacturing facility;
- seek to identify and develop additional product candidates;
- seek marketing approvals for any of our product candidates that successfully complete clinical trials, if any;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- until our manufacturing facility is fully validated, continued limited manufacturing by third parties for clinical development;
- maintain, expand, protect and defend our intellectual property portfolio;
- hire and retain additional clinical, quality control, scientific and general and administration personnel;
- acquire or in-license other drugs, technologies or intellectual property rights; and
- add operational, financial and management information systems and personnel, including personnel to support our research and development programs, any future commercialization efforts and operations as a public company.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

As of September 30, 2022, we had cash and cash equivalents and short-term investments of $371.8 million. We believe that our existing cash and cash equivalents and short-term investments will enable us to fund our operating expenses and capital expenditure requirements through at least 12 months from the issuance of the consolidated financial statements included in this Quarterly Report.

See “—Liquidity and capital resources” and “Risk factors—Risks related to our financial position and need for additional capital.”

The COVID-19 pandemic

We are continuing to generally monitor the spread of COVID-19, and, throughout the pandemic, have implemented measures designed to comply with applicable federal, state and local guidelines, as well as care for our employee's health and well-being. We will continue to examine our protocols as the pandemic and health guidance evolves. The COVID-19 pandemic continues to affect the United States and global economies and has affected and may continue to affect our operations and those of third parties on which we rely, including by causing disruptions in our raw material and anti-PD-1 supply, the manufacturing of our product candidates and our developing commercialization processes. In addition, timing of patient enrollment and treatment in certain of our ongoing clinical studies has been impacted by the pandemic. However, the extent of these delays is currently unknown and has and will likely continue to vary by clinical study. In addition, we may incur unforeseen costs as a result of disruptions in raw material supplies, clinical product supplies, and preclinical studies or clinical trial delays. The full extent to which the COVID-19 pandemic will directly or indirectly impact our business, results of operations and financial condition will depend on future developments that are highly uncertain and cannot be accurately predicted, including new information that may emerge concerning COVID-19, the actions taken in an effort to contain it or to potentially treat or continue to vaccinate against COVID-19 and the economic impact on local, regional, national and international markets. We continue to monitor this situation and the possible effects on our financial condition, liquidity, operations, suppliers, supplies, industry and workforce. For additional information, see "Risk Factors—Our financial condition and results of operations could be adversely affected by the coronavirus disease-2019, or COVID-19, outbreak." in Part II, Item 1A of this Quarterly Report.

Components of our results of operations

Revenue

To date, we have not generated any revenue from product sales as we do not have any approved products and do not expect to generate any revenue from the sale of products in the near future. If our development efforts for RP1 or any other product candidates that we may develop in the future are successful and result in regulatory approval, or if we enter into collaboration or license agreements with third parties, we may generate revenue in the future from a combination of product sales or payments from those collaborations or license agreements.

Operating expenses

Our expenses since inception have consisted solely of research and development costs and general and administrative costs.

Research and development expenses

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

- expenses incurred under agreements with third parties, including clinical research organizations, or CROs, that conduct research, preclinical activities and clinical trials on our behalf as well as contract manufacturing organizations, or CMOs, that manufacture our product candidates for use in our preclinical and clinical trials;
- salaries, benefits and other related costs, including stock-based compensation expense, for personnel engaged in research and development functions;
- costs of outside consultants engaged in research and development functions, including their fees, stock-based compensation and related travel expenses;
- the costs of laboratory supplies and acquiring, developing and manufacturing preclinical study and clinical trial materials;
- costs related to compliance with regulatory requirements in connection with the development of our product candidates; and
- facility-related expenses, which include direct depreciation costs and allocated expenses for rent and maintenance of facilities and other operating costs.

These costs may be partially offset by cost-sharing arrangements under collaboration agreements that we may enter from time to time.

We expense research and development costs as incurred. We recognize external development costs based on an evaluation of the progress to completion of specific tasks using information provided to us by our service providers. Payments for these activities are based on the terms of the individual agreements, which may differ from the pattern of costs incurred, and are reflected in our consolidated financial statements as prepaid or accrued research and development expenses.

Our direct external research and development expenses are tracked on a program-by-program basis and consist of costs, such as fees paid to consultants, contractors, CMOs, and CROs in connection with our preclinical and clinical development activities. We do not allocate personnel costs, costs associated with our discovery efforts, laboratory supplies, and facilities, including depreciation or other indirect costs, to specific product development programs because these costs are deployed across multiple product development programs and, as such, are not separately classified. All non-employee costs associated with our manufacturing facility have been fully burdened to our RP1 program.

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 that our research and development expenses will continue to increase for the foreseeable future as we continue enrollment and initiate additional clinical trials and continue to discover and develop additional product candidates. The successful development and commercialization of our product candidates is highly uncertain. This is due to the numerous risks and uncertainties associated with product development and commercialization, including the following:

- the scope, rate of progress, expense and results of our ongoing clinical trials, as well as future clinical trials or other product candidates and other research and development activities that we may conduct;
- the number and scope of preclinical and clinical programs we decide to pursue;
- our ability to maintain our current research and development programs and to establish new ones;
- uncertainties in clinical trial design;
- the rate of enrollment in clinical trials;
- the successful completion of clinical trials with safety, tolerability, and efficacy profiles that are satisfactory to the FDA or any comparable foreign regulatory authority;
- the receipt of regulatory approvals from applicable regulatory authorities;
- our success in operating our manufacturing facility, or securing manufacturing supply through relationships with third parties;
- our ability to obtain and maintain patents, trade secret protection, and regulatory exclusivity, both in the United States and internationally;
- our ability to maintain, expand, protect and defend our rights in our intellectual property portfolio;
- the commercialization of our product candidates, if and when approved;
- the acceptance of our product candidates, if approved, by patients, the medical community, and third-party payors;
- our ability to successfully develop our product candidates for use in combination with third-party products or product candidates;
- negative developments in the field of immuno-oncology;
- competition with other products; and
- significant and changing government regulation and regulatory guidance.

A change in the outcome of any of these variables with respect to the development of a product candidate could mean a significant change in the costs and timing associated with the development of that product candidate. For example, if the FDA or another regulatory authority were to require us to conduct clinical trials beyond those that we anticipate will be required for the completion of clinical development of a product candidate, or if we experience significant trial delays due to patient enrollment or other reasons, we could be required to expend significant additional financial resources and time on the completion of clinical development. We may never succeed in obtaining regulatory approval for any of our product candidates.

Selling, general and administrative expenses

Selling, general and administrative expenses consist primarily of salaries and other related costs, including stock-based compensation, for personnel in our executive, finance, corporate, commercial and business development and administrative functions. Selling, general and administrative expenses also include professional fees for legal, patent, accounting, auditing, tax and consulting services, pre-commercial planning, travel expenses, and facility-related expenses, which include direct depreciation costs and allocated expenses for rent and maintenance of facilities and other operating costs.

We expect that our selling, general and administrative expenses will continue to increase in the future as we increase our selling, general and administrative headcount to support our continued research and development and pre-launch activities to prepare for potential commercialization of our product candidates. We also expect to continue to incur increased expenses, including accounting, audit, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements; director and officer insurance costs; and investor and public relations costs.

Other income (expense), net

Research and development incentives

Research and development incentives consists of reimbursements of research and development expenditures. We participate, through our subsidiary in the United Kingdom, in the research and development program provided by the United Kingdom tax relief program, such that a percentage of up to 14.5% of our qualifying research and development expenditures are reimbursed by the United Kingdom government, and such incentives are reflected as other income.

Investment income

Investment income consists of income earned on our cash and cash equivalents and short-term investments.

Interest expense on finance lease liability

Interest expense on finance lease liability consists of amortization of finance charges under our financing lease.

Other income (expense), net

Other income (expense), net consists primarily of realized and unrealized foreign currency transaction gains and losses.

Income taxes

Since our inception and through September 30, 2022, we have not recorded any income tax benefits for the net losses we incurred in each jurisdiction in which we operate, as we believe, based upon the weight of available evidence, that it is more likely than not that all of our net operating loss carryforwards will not be realized.

Results of operations

Comparison of the three months ended September 30, 2022 and 2021

The following chart summarizes our results of operations for the three months ended September 30, 2022 and 2021:

	Three Months Ended September 30,		
	2022	2021	Change
	(Amounts in thousands)		
Operating expenses:			
Research and development	$ 28,834	$ 19,902	$ 8,932
General and administrative	12,745	9,345	3,400
Total operating expenses	41,579	29,247	12,332
Loss from operations	(41,579)	(29,247)	(12,332)
Other income (expense):			
Research and development incentives	574	725	(151)
Investment income	1,112	80	1,032
Interest expense on finance lease liability	(550)	(557)	7
Other (expense) income	(2,659)	(356)	(2,303)
Total other income (expense), net	(1,523)	(108)	(1,415)
Net loss	$ (43,102)	$ (29,355)	$ (13,747)

Research and development expenses

Research and development expenses for the three months ended September 30, 2022 were $28.8 million, compared to $19.9 million for the three months ended September 30, 2021. The following table summarizes our research and development expenses for the three months ended September 30, 2022 and 2021:

	Three Months Ended September 30,		
	2022	2021	Change
Direct research and development expenses by program:			
RP1	9,531	4,205	5,326
RP2	552	3,707	(3,155)
RP3	2,482	321	2,161
Unallocated research and development expenses:			—
Personnel related (including stock-based compensation)	12,495	8,984	3,511
Other	3,774	2,685	1,089
Total research and development expenses	$ 28,834	$ 19,902	$ 8,932

The change in our direct research and development expenses between our product candidates is associated with technology transfer, process development, qualification and comparability of our in-house manufactured materials compared to our third-party manufactured materials in readiness for utilizing our product candidates made at our in-house manufacturing facility in our clinical development programs and preparation for potential commercial manufacture, if approved.

The increase in RP1 is primarily the result of an increase in our number of clinical trial sites and patient enrollment as compared to the prior year, and reduction of $1.6 million of costs sharing in the CERPASS trial from Regeneron during the current period as discussed in Note 10 to the consolidated financial statements appearing elsewhere in this Quarterly Report. During the three months ended September 30, 2022, manufacturing increased its focused on the technology transfer and process development of RP3, which is the driver of the change in RP2 and RP3 program costs year over year.

The increase of $4.6 million in our unallocated expenses was due primarily to a $3.5 million increase in personnel-related costs, including a $3.2 million increase in payroll and fringe benefits and a stock-based compensation increase of $0.3 million. The increase in personnel-related costs largely reflected the hiring of additional personnel in our research and development functions as we continue to expand the development plan in multiple indications. Personnel related costs for the three months ended September 30, 2022 and 2021 included stock-based compensation expense of $2.5 million and $2.2 million, respectively.

Selling, general and administrative expenses

Selling, general and administrative expenses were $12.7 million for the three months ended September 30, 2022, compared to $9.3 million for the three months ended September 30, 2021. The increase of $3.4 million is primarily the result of an increase of $1.1 million in personnel related costs, including a stock-based compensation increase of $0.4 million, and an increase of $0.8 million in payroll and fringe benefits. The increase in personnel related costs was driven by the continued hiring of additional personnel in our general and administrative functions, including the addition of commercial personnel associated with pre-launch commercial planning and initial build of the Company's commercial infrastructure, which accounts for approximately $0.3 million of the increase. In addition, there is an increase of approximately $1.4 million related to outside services and external expenses related to commercial planning and initial commercial activities compared to prior year, as we expand our operations.

Total other (expense) income, net

Other net expense was $1.5 million for the three months ended September 30, 2022, compared to $0.1 million for the three months ended September 30, 2021. The net change of $1.4 million is primarily attributable to an increase in expense of $2.3 million in the current year compared to the prior year due to exchange rate fluctuations related to the changes in foreign exchange rates of the British Pound Sterling to the United States Dollar, specifically on intercompany and other non-functional currency transactions. This increased expense is somewhat offset by an increase in investment income of approximately $1.0 million.

Comparison of the six months ended September 30, 2022 and 2021

The following chart summarizes our results of operations for the six months ended September 30, 2022 and 2021:

	Six Months Ended September 30,		
	2022	**2021**	**Change**
	(Amounts in thousands)		
Operating expenses:			
Research and development	$ 58,312	$ 38,456	$ 19,856
General and administrative	24,143	18,172	5,971
Total operating expenses	82,455	56,628	25,827
Loss from operations	(82,455)	(56,628)	(25,827)
Other income (expense):			
Research and development incentives	1,425	1,513	(88)
Investment income	1,455	172	1,283
Interest expense on finance lease liability	(1,102)	(1,115)	13
Other (expense) income	(4,678)	(608)	(4,070)
Total other income (expense), net	(2,900)	(38)	(2,862)
Net loss	$ (85,355)	$ (56,666)	$ (28,689)

Research and development expenses

	Six Months Ended September 30,		
	2022	2021	Change
Direct research and development expenses by program:			
RP1	15,492	7,907	7,585
RP2	2,420	6,786	(4,366)
RP3	7,490	559	6,931
Unallocated research and development expenses:			—
Personnel related (including stock-based compensation)	25,000	18,238	6,762
Other	7,910	4,966	2,944
Total research and development expenses	$ 58,312	$ 38,456	$ 19,856

Research and development expenses for the six months ended September 30, 2022 were $58.3 million, compared to $38.5 million for the six months ended September 30, 2021. The increase of $19.9 million was due primarily to an increase of approximately $10.2 million in direct research costs related to our ongoing clinical trials for RP1, RP2 and RP3, as well as approximately $9.7 million in unallocated research and development costs. The change in our research and development expense between our product candidates is associated with technology transfer and process development underway in readiness for bringing our manufacturing facility online to support our clinical development and prepare for commercial launch. Furthermore, the increase in RP1 is primarily the result of an increase in our number of clinical trial sites and patient enrollment as compared to the prior year, as well as a $1.8 million reduction of cost sharing in the CERPASS trial from Regeneron during the six months ended September 30, 2022 as discussed in Note 10 to the consolidated financial statements appearing elsewhere in this Quarterly Report. In addition, manufacturing continued to advance the RP2 and RP3 technology transfer and studies necessary to qualify the in-house manufactured RP2 and RP3 product candidates for use in clinical trials during the six months ended September 30, 2022, as well as continued clinical trial development of our product candidates.

The increase in unallocated research and development costs is mainly attributable to a $6.8 million increase in personnel-related costs, including a $6.3 million increase in payroll and fringe benefits and a stock-based compensation increase of $0.5 million. The increase in personnel-related costs largely reflected the hiring of additional personnel in our research and development functions as we expanded the development plan in multiple indications. Personnel related costs for the six months ended September 30, 2022 and 2021 included stock-based compensation expense of $5.1 million and $4.7 million, respectively.

Selling, general and administrative expenses

Selling, general and administrative expenses were $24.1 million for the six months ended September 30, 2022, compared to $18.2 million for the six months ended September 30, 2021. The increase of $6.0 million is primarily the result of an increase of $2.5 million in personnel related costs, including a stock-based compensation increase of $1.2 million, and an increase of $1.4 million in payroll and fringe benefits. The increase in personnel related costs was driven by the hiring of additional personnel, including the initial expenses related to commercial personnel associated with pre-launch commercial planning and initial build of our commercial infrastructure. Personnel related costs for the six months ended September 30, 2022 and 2021 included stock-based compensation expense of $9.0 million and $7.9 million, respectively.

Total other (expense) income, net

Other net expense was $2.9 million for the six months ended September 30, 2022, compared to $37.8 thousand for the six months ended September 30, 2021. The net change of $2.9 million is primarily driven by increases in expense of $4.1 million in the current year compared to the prior year due to exchange rate fluctuations related to the changes in foreign exchange rates of the British Pound Sterling to the United States Dollar, specifically on intercompany and other non-functional currency transactions. This increase in expense is somewhat offset by an increase in investment income of approximately $1.3 million compared to the prior year.

Liquidity and capital resources

Since our inception, we have not generated any revenue from product sales and have incurred significant operating losses and negative cash flows from our operations. We have not yet commercialized any of our product candidates, which are

in various phases of preclinical and clinical development, and we do not expect to generate revenue from sales of any products for the foreseeable future, if at all.

Sources of liquidity

To date, we have financed our operations primarily with proceeds from the sale of equity securities and, to a lesser extent, proceeds from borrowing under a secured loan facility. Through September 30, 2022, we had received net proceeds of $693.3 million through the sale of shares of common stock and warrants exercisable for common stock in public offerings and at-the-market offerings. As of September 30, 2022, we had cash and cash equivalents and short-term investments of $371.8 million.

On June 23, 2022, in connection with our entry into a new sales agreement with the SVB Securities LLC, or the Agent, we and the Agent mutually agreed to terminate a previous sales agreement. Under the new sales agreement, we may sell, from time to time, at our option, up to an aggregate of $100 million of shares of our common stock by methods deemed to be an "at the market offering" as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or if authorized by us, in negotiated transactions or block trade, in each case, pursuant to a registration statement on Form S-3 filed by us with the Securities and Exchange Commission on June 23, 2022.

Cash flows

The following table summarizes our cash flows for each of the periods presented:

	Six Months Ended September 30, 2022	
	2022	2021
	(Amounts in thousands)	
Net cash used in operating activities	$ (66,665)	$ (41,275)
Net cash provided by investing activities	5,351	15,940
Net cash provided by financing activities	39,945	2,270
Effect of exchange rate changes on cash and cash equivalents	4,351	516
Net decrease in cash and cash equivalents	$ (17,018)	$ (22,549)

Operating activities

During the six months ended September 30, 2022, net cash used in operating activities was $66.7 million, primarily resulting from our net loss of $85.4 million, partially offset by non-cash charges of $15.3 million, primarily consisting of stock-based compensation expense of $14.2 million, and an increase in cash of $3.4 million related to changes in our operating assets and liabilities. Changes in our operating assets and liabilities for the six months ended September 30, 2022 consisted primarily of a $2.8 million increase in accrued expenses and other current liabilities, a $1.4 million increase in research and development incentives receivable from the United Kingdom government due to the timing and amount of our qualifying expenditures, a net $1.2 million change in operating and financing right-of-use assets and lease liabilities, a $0.7 million increase in accounts payable, as well as a $0.2 million decrease in prepaid expenses and other current assets.

During the six months ended September 30, 2021, net cash used in operating activities was $41.3 million, primarily resulting from our net loss of $56.7 million, partially offset by an increase in non-cash charges of $14.9 million, primarily consisting of an increase in stock-based compensation expense of $7.3 million, and an increase in cash of $0.5 million related to changes in our operating assets and liabilities. Net cash used by our changes in our operating assets and liabilities for the six months ended September 30, 2021 consisted primarily of a $1.5 million increase in research and development incentives receivable from the United Kingdom government due to the timing and amount of our qualifying expenditures, a $1.3 million increase in prepaid expenses and other current assets, a $1.3 million increase in accrued expenses and other current liabilities, and a net $1.2 million change in operating and financing right-of-use assets and lease liabilities.

Investing activities

During the six months ended September 30, 2022, net cash provided by investing activities was $5.4 million, consisting of $200.5 million in proceeds from sales and maturities of short-term investments, partially offset by $193.7 million in purchases of available for sale securities and $1.5 million in purchases of property, plant and equipment.

During the six months ended September 30, 2021, net cash provided by investing activities was $15.9 million, consisting of $128.0 million in proceeds from sales and maturities of short-term investments, partially offset by $111.4 million in purchases of available for sale securities and $0.7 million in purchases of property, plant and equipment.

Financing Activities

During the six months ended September 30, 2022, net cash provided by financing activities was $39.9 million, consisting primarily of $37.4 million from the issuance of common stock through sales under our at-the-market facilities, as well as approximately $2.7 million in proceeds from the exercise of stock options.

During the six months ended September 30, 2021, net cash provided by financing activities was $2.3 million, consisting of primarily $2.4 million in proceeds from the exercise of stock options.

Funding requirements

Our plan of operation is to continue implementing our business strategy, continue research and development of RP1 and our other product candidates and continue to expand our research pipeline and our internal research and development capabilities. We expect our expenses to increase substantially in connection with our ongoing activities, particularly as we advance the preclinical activities and clinical trials of our product candidates and if and as we:

- conduct our current and future clinical trials with RP1, RP2 and RP3;
- further preclinical development of our RPx platform;
- operate, qualify and maintain our in-house manufacturing facility and qualify and maintain our product candidates made therein for use in our clinical trials;
- seek to identify and develop additional product candidates;
- seek marketing approvals for any of our product candidates that successfully complete clinical trials, if any;
- establish a sales, marketing and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- until our planned manufacturing facility is fully validated, continued limited manufacturing by third parties for clinical development.
- maintain, expand, protect and defend our intellectual property portfolio;
- hire and retain additional clinical, quality control, scientific and general and administration personnel;
- acquire or in-license other drugs, technologies or third-party intellectual property; and
- add operational, financial and management information systems and personnel, including personnel to support our research and development programs, any future commercialization efforts and operations as a public company.

As of September 30, 2022, we had cash and cash equivalents and short-term investments of $371.8 million. In addition, in October 2022, the Company completed a $200 million non-dilutive debt financing with Hercules Capital, Inc. We believe that our existing cash, cash equivalents and short-term investments as of September 30, 2022, together with unrestricted proceeds available to be drawn under the Hercules Term Loan Facility, will enable us to fund our operations into calendar 2025, inclusive of the costs of funding commercial infrastructure and running a confirmatory clinical trial to support a potential filing for FDA approval in anti-PD1 failed melanoma under the accelerated approval pathway. We have based these estimates on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we expect. Refer to Note 13, subsequent events, of the "Notes to Condensed Consolidated Financial Statements" contained in Part I, Item I of this Quarterly Report on Form 10-Q for additional details of the agreement with Hercules.

Because of the numerous risks and uncertainties associated with the development of RP1 and other product candidates and programs, and because the extent to which we may enter into collaborations with third parties for development of our product candidates is unknown, we are unable to estimate the timing and amounts of increased capital outlays and operating

expenses associated with completing the research and development of our product candidates. Our future capital requirements will depend on many factors, including those described in this section and above under "—Operating expenses—Research and development expenses."

Developing novel biopharmaceutical products, including conducting preclinical studies and clinical trials, is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain marketing approval for any product candidates or generate revenue from the sale of any products for which we may obtain marketing approval. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of therapies that we do not expect to be commercially available for many years, if ever. Accordingly, we will need to obtain substantial additional funds to achieve our business objectives.

Adequate additional funds may not be available to us on acceptable terms, or at all. We do not currently have any committed external source of funds. To the extent that we raise additional capital through the sale of our equity or convertible debt securities, our shareholders' interest may be diluted, and the terms of these securities may include liquidation or other preferences and anti-dilution protections that could adversely affect the rights of our common stockholder. Additional debt or preferred equity financing, if available, may involve agreements that include restrictive covenants that may limit our ability to take specific actions, such as incurring debt adversely impact our ability to conduct our business, and may require the issuance of warrants, which could potentially dilute your ownership interest.

If we raise additional funds through collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our technology, future revenue streams, research programs, or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings or collaborations, strategic alliances or licensing arrangements with third parties when needed, we may be required to delay, limit, reduce and/or terminate our product development programs or any future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Contractual obligations and commitments

During the three months ended September 30, 2022, there were no material changes to our contractual obligations and commitments from those described under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations—Contractual Obligations and Commitments" in our Annual Report on Form 10-K for the year ended March 31, 2022, which was filed with the SEC on May 20, 2021.

Collaborations

BMS

In February 2018, we entered into a Clinical Trial Collaboration and Supply Agreement with BMS. Pursuant to the agreement, BMS is providing to us, at no cost, nivolumab, its anti-PD-1 therapy, for use in combination with RP1 in our ongoing Phase 1/2 clinical trial. Under the agreement, we will sponsor, fund and conduct the clinical trial in accordance with an agreed-upon protocol. BMS granted us a non-exclusive, non-transferrable, royalty-free license (with a right to sublicense) under its intellectual property to use nivolumab in the clinical trial and has agreed to supply nivolumab, at no cost to us, for use in the clinical trial. Both parties will own the study data produced in the clinical trial, other than study data related solely to nivolumab, which will belong solely to BMS, or study data related solely to RP1, which will belong solely to us. In January 2020, this agreement was expanded to cover an additional cohort of 125 patients with anti-PD-1 failed melanoma.

Unless earlier terminated, the agreement will remain in effect until (i) the completion of the clinical trial, (ii) all related clinical trial data have been delivered to both parties and (iii) the completion of any statistical analyses and bioanalyses contemplated by the clinical trial protocol or any analysis otherwise agreed upon by the parties. The agreement may be terminated by either party (x) in the event of an uncured material breach by the other party, (y) in the event the other party is insolvent or in bankruptcy proceedings or (z) for safety reasons. Upon termination, the licenses granted to us to use nivolumab in the clinical trial will terminate. The agreement contains representations, warranties, undertakings and indemnities customary for a transaction of this nature.

In April 2019, we entered into a separate agreement with BMS on terms similar to the terms set forth in the agreement described above, pursuant to which BMS will provide, at no cost to us, nivolumab for use in our Phase 1 clinical trial of RP2 in combination with nivolumab.

Regeneron

In May 2018, we entered into a Master Clinical Trial Collaboration and Supply Agreement with Regeneron. Pursuant to the agreement we agreed to undertake one or more clinical trials with Regeneron for the administration of our product candidates in combination with cemiplimab, an anti-PD-1 therapy developed by Regeneron, across multiple solid tumor types, the first of which, agreed in June 2018, is our ongoing Phase 2 clinical trial testing RP1 in combination with cemiplimab versus cemiplimab alone in patients with CSCC. Each clinical trial will be conducted pursuant to an agreed study plan which, among other things, will identify the name of the sponsor and which party will manage the particular study, and include the protocol, the budget and a schedule of clinical obligations. The first study plan related to the Phase 2 clinical trial in CSCC has been agreed.

Pursuant to the terms of the agreement, each party granted the other party a non-exclusive license of their respective intellectual property and agreed to contribute the necessary resources needed to fulfill their respective obligations, in each case, under the terms of agreed study plans. Development costs of an agreed study plan will be split equally. In July 2022, Regeneron informed the Company that the costs of the study have reached the initial budget for the initial study plan of June 2018 and that Regeneron's reimbursement of CERPASS study costs to the Company have completed in the period ending June 30, 2022 in relation to the initial study budget. The Company and Regeneron are in communication regarding receiving Regeneron's acknowledgement of the sharing of the study costs according to the current budget that superseded that of the initial study plan and initial budget. As a result of this notice from, and the ongoing communications with, Regeneron, we have not recorded any cost-sharing reimbursements from Regeneron in prepaid expenses and other current assets in the consolidated balance sheet or as an offset to research and development expense within the consolidated statement of operations since Regeneron informed us that Regeneron's reimbursement of CERPASS study costs have completed. The agreement contains representations, warranties, undertakings and indemnities customary for a transaction of this nature. The agreement also contains certain time-based covenants that restrict us from entering into a third-party arrangement with respect to the use of our product candidates in combination with an anti-PD-1 therapy and that restrict Regeneron from entering into a third-party arrangement with respect to the use of cemiplimab in combination with an HSV-1 virus, in each case, for the treatment of a tumor type that is the subject of a clinical trial to which the covenants apply. Unless otherwise mutually agreed in a future study plan, these covenants are only applicable to our ongoing Phase 2 clinical trial in CSCC.

The agreement may be terminated by either party if (i) there is no active study plan for which a final study report has not been completed and the parties have not entered into a study plan for an additional clinical trial within a period of time after the delivery of the most recent final study report or (ii) in the event of a material breach.

Critical accounting policies and estimates

Our management's discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States. The preparation of our consolidated financial statements and related disclosures requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, costs and expenses and the disclosure of contingent assets and liabilities in our consolidated financial statements. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in greater detail in Note 2 to our consolidated financial statements appearing elsewhere in this Quarterly Report, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our consolidated financial statements.

Accrued research and development expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual costs. The majority of our service providers invoice us in arrears for services performed, on a pre-determined schedule or when contractual milestones are met; however, some require advanced payments. We make estimates of our accrued expenses as of each balance sheet date in the consolidated financial statements based on facts and circumstances known to us at that time. Examples of estimated accrued research and development expenses include fees paid to:

- CROs in connection with performing research activities and conducting preclinical studies and clinical trials on our behalf;
- CMOs in connection with the production of preclinical and clinical trial materials;
- investigative sites or other service providers in connection with clinical trials;
- vendors in connection with preclinical and clinical development activities; and
- vendors related to product manufacturing and development and distribution of preclinical and clinical supplies.

We base our expenses related to preclinical studies and clinical trials on our estimates of the services received and efforts expended pursuant to quotes and contracts with multiple CMOs and CROs that supply, conduct and manage preclinical studies and clinical trials on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the expense. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from the estimate, we adjust the accrual or the amount of prepaid expenses accordingly. Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period. To date, there have not been any material adjustments to our prior estimates of accrued research and development expenses.

Stock-based compensation

We issue stock-based awards to employees, directors, consultants and non-employees in the form of stock options and restricted stock units. We measure such stock-based awards in accordance with ASC 718, Compensation — Stock Compensation, which requires all stock-based awards to be recognized in the consolidated statements of operations and comprehensive loss based on their fair value on the date of the grant and the related compensation expense for those awards is recognized over the requisite service period, which is generally the vesting period of the respective award. We have, to date, only issued stock-based awards with service-based vesting conditions and record the expense for these awards using the straight-line method. The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model, which requires inputs based on certain subjective assumptions, including the expected stock price volatility, the expected term of the option, the risk-free interest rate for a period that approximates the expected term of the option, and our expected dividend yield. See Note 9 to our consolidated financial statements appearing elsewhere in this Quarterly Report for more information. Forfeitures are accounted for as they occur. The fair value of each stock-based award is estimated on the date of grant based on the fair value of our common stock on that same date.

We classify stock-based compensation expense in our consolidated statements of operations in the same manner in which the award recipient's payroll costs are classified or in which the award recipient's service payments are classified.

Recently issued accounting pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 to our consolidated financial statements appearing elsewhere in this Quarterly Report.

Emerging growth company status

As an "emerging growth company," the Jumpstart Our Business Startups Act of 2012 permits us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have irrevocably elected to "opt out" of this provision and, as a result, we will comply with new or revised accounting standards when they are required to be adopted by public companies that are not emerging growth companies.

Item 3. Quantitative and Qualitative Disclosures about Market Risks.

Not applicable.

Item 4. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, refers to controls and procedures that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that such information is accumulated and communicated to a company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures as of September 30, 2022. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of September 30, 2022.

In designing and evaluating our disclosure controls and procedures, management recognizes that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a control system, misstatements due to error or fraud may occur and not be detected.

Changes in internal control over financial reporting

There have been no changes in our internal control over financial reporting for the three months ended September 30, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings.

We are not currently a party to any material legal proceedings.

Item 1A. Risk Factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information in this Quarterly Report on Form 10-Q, including our consolidated financial statements and related notes and "Management's discussion and analysis of results of operations and financial condition." If any of the following risks are realized, our business, financial condition, operating results and prospects could be materially and adversely affected. In that event, the price of our common stock could decline, and you could lose part or all of your investment. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial may also adversely affect our business.

Summary of risk factors

Material risks that may affect our business, operating results and financial condition include, but are not necessarily limited to, those relating to:

- the timing, progress, and results of our preclinical studies and clinical trials for our product candidates, and the timing, scope or likelihood of regulatory filings and approvals for any of our product candidates;
- our ability to develop and advance any future product candidates based on our novel proprietary RPx platform and successfully complete clinical trials;
- our ability to develop our product candidates for use in combination with other checkpoint blockade therapies, including anti-PD-1;
- our ability to successfully commercialize any product candidate for which we receive regulatory approval and our expectations regarding the size of the patient populations or the market acceptance of our product candidates if approved for commercial use;
- our ability to compete with other biopharmaceutical companies, biotechnology companies and other third parties and risks associated with such third parties developing or commercializing products more quickly or marketing them more successfully than us;
- negative developments in the field of immuno-oncology including clinical or commercial developments that may be attributed to our product candidates;
- our history of losses, the likelihood that we will continue to incur substantial and increasing net losses in the future, and the likelihood that we will require additional financing to achieve our goals;
- our intellectual property position, including the scope of protection we are able to establish and maintain for intellectual property rights covering RP1 and our other product candidates, claims others may make regarding rights in our intellectual property, and any potential infringement, misappropriation or other violation or alleged violation of any third-party intellectual property rights;
- our ability to successfully complete transfer of our product manufacturing to our in-house manufacturing facility from our contract manufacturers including comparability analysis and to qualify, obtain approval for, and maintain successful operation, approval and qualification of our in-house manufacturing operations;
- our ability to obtain and maintain sufficient quantities of raw material supplies to build or maintain our product candidate supplies or otherwise operate our in-house manufacturing facility;
- the costs of operating our in-house manufacturing facility and our reliance on third-party collaborators and clinical trial service providers, which may be single or of limited source;

- our compliance with domestic and foreign laws, rules and regulations and the consequences in the event that we fail to comply with such laws, rules and regulations;
- our ability to retain the continued service of our key professionals and to identify, hire and retain additional qualified professionals;
- our competitive position, and developments and projections relating to our competitors and our industry;
- the impact of the COVID-19 coronavirus, or COVID-19, as a global pandemic and related public health issues, including potential material supplies and supply chain disruptions, hiring and retaining talent, and global or national economic impacts such as inflation; and
- the ongoing military conflict between Russia and Ukraine and the impact on the global economy and related governmental imposed sanctions and potential material supplies and supply chain disruptions and global or national economic impacts such as inflation.

Risks related to product development

Our product candidates are in the early stages of development, are not approved for commercial sale and might never receive regulatory approval or become commercially viable. We have never generated any revenue from product sales and may never be profitable.

All of our product candidates are in research or development. We have not generated any revenues from the sale of products and do not expect to do so for at least the next several years. Our lead product candidate, RP1, and any other product candidates will require extensive preclinical and/or clinical testing and regulatory approval prior to commercial use. Our research and development efforts may not be successful. Even if our clinical development efforts result in positive data, our product candidates may not receive regulatory approval or be successfully introduced and marketed at prices that would permit us to operate profitably.

An underlying problem with our proprietary RPx platform would adversely affect our business and may require us to discontinue development of product candidates based on the same or similar therapeutic approaches.

Since all of the product candidates in our current pipeline are based on our proprietary RPx platform, if any of our product candidates fail in development as a result of any underlying problem with our proprietary RPx platform, then we may be required to discontinue development of all product candidates that are based on our therapeutic approach. If we were required to discontinue development of our product candidates that are based on our therapeutics approach, or if any of them were to fail to receive regulatory approval or achieve sufficient market acceptance, we could be prevented from or significantly delayed in achieving profitability. We can provide no assurance that we would be successful at developing other product candidates based on an alternative therapeutic approach.

We will not be able to commercialize our product candidates if our preclinical studies do not produce successful results and/or our clinical trials do not demonstrate the safety and efficacy of our product candidates.

Our product candidates are susceptible to the risks of failure inherent at any stage of product development, including the occurrence of unexpected or unacceptable adverse events or the failure to demonstrate efficacy in clinical trials. Clinical development is expensive and can take many years to complete, and its outcome is inherently uncertain.

The results of preclinical studies, preliminary study results, and early clinical trials of our product candidates may not be predictive of the results of later stage clinical trials. Our product candidates may not perform as we expect, may ultimately have a different or no impact on tumors, may have a different mechanism of action than we expect in humans, and may not ultimately prove to be safe and effective.

Preliminary and final results from preclinical studies and early stage trials, and trials in compounds that we believe are similar to ours, may not be representative of results that are found in larger, controlled, blinded, and longer-term studies. Product candidates may fail at any stage of preclinical or clinical development. Product candidates may fail to show the desired safety and efficacy traits even if they have progressed through preclinical studies or initial clinical trials. Preclinical studies and clinical trials may also reveal unfavorable product candidate characteristics, including safety concerns. A number of companies in the biopharmaceutical industry have suffered significant setbacks in clinical trials, notwithstanding promising results in earlier preclinical studies or clinical trials or promising mechanisms of action. In some instances, there can be significant

variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the clinical trial protocols and the rate of dropout among clinical trial participants. Moreover, should there be an issue with the design of a clinical trial, our results may be impacted. We may not discover such a flaw until the clinical trial is at an advanced stage.

We may also experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates, including:

- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials or be lost to follow-up at a higher rate than we anticipate, or may elect to participate in alternative clinical trials sponsored by our competitors with product candidates that treat the same indications as our product candidates;
- regulators or institutional review boards, or IRBs, may not authorize us or our investigators to commence a clinical trial, conduct a clinical trial at a prospective trial site, or amend trial protocols, or may require that we modify or amend our clinical trial protocols;
- we may experience delays in reaching, or fail to reach, agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites and/or contract research organizations, or CROs;
- clinical trials of our product candidates may produce negative or inconclusive results, or our studies may fail to reach the necessary level of statistical significance, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs;
- our third-party contractors may fail to comply with regulatory requirements or the clinical trial protocol, or meet their contractual obligations to us in a timely manner, or at all, or we may be required to engage in additional clinical trial site monitoring;
- we, regulators, or IRBs may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks, undesirable side effects, or other unexpected characteristics of the product candidate, or due to findings of undesirable effects caused by a chemically or mechanistically similar therapeutic or therapeutic candidate;
- changes in manufacturing facilities or the manufacturing process for our product candidates may impact how our product candidates perform in clinical trials;
- changes could be adopted in marketing approval policies during the development period, rendering our data insufficient to obtain marketing approval;
- statutes or regulations could be amended or new ones could be adopted, especially in light of the upcoming reauthorization of the Prescription Drug User Fee Act;
- changes could be adopted in the regulatory review process for submitted product applications;
- the cost of clinical trials of our product candidates may be greater than we anticipate or we may have insufficient funds for a clinical trial or to pay the substantial user fees required by the FDA upon the filing of a Biologics License Application, or BLA, or equivalent authorizations from comparable foreign regulatory authorities;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate or we may not be able to obtain them on favorable terms due to reasons such as international trade policies and supply chain disruptions;
- we may decide, or regulators may require us, to conduct or gather, as applicable, additional clinical trials, analyses, reports, data, or preclinical trials, or we may abandon product development programs. By example, the FDA may determine that larger trials, Phase 3 trials, randomized and controlled clinical trials, or clinical trials

designed to replicate results found in our registrational or pivotal trials are required before we may file a BLA or before the FDA will approve a marketing application;

- we may fail to reach an agreement with regulators or IRBs regarding the scope, design, or implementation of our clinical trials, and the FDA or comparable foreign regulatory authorities may require changes to our study designs that make further study impractical or not financially prudent;
- regulators may ultimately disagree with the design or our conduct of our preclinical studies or clinical trials, finding that they do not support product candidate approval;
- we may have delays in adding new investigators or clinical trial sites, or we may experience a withdrawal of clinical trial sites;
- patients that enroll in our studies may misrepresent their eligibility or may otherwise not comply with the clinical trial protocol, resulting in the need to drop the patients from the study or clinical trial, increase the needed enrollment size for the clinical trial or extend its duration;
- there may be regulatory questions or disagreements regarding interpretations of data and results;
- the FDA or comparable foreign regulatory authorities may disagree with our study design, including endpoints, or our interpretation of data from preclinical studies and clinical trials or find that a product candidate's benefits do not outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may not accept data from studies with clinical trial sites in foreign countries;
- the FDA or comparable foreign regulatory authorities may disagree with our intended indications;
- the FDA or comparable foreign regulatory authorities may fail to approve or subsequently find fault with the manufacturing, testing, comparability or quality processes or our manufacturing facilities for clinical and future commercial supplies;
- the data collected from clinical trials of our product candidates, including our registration directed or registration intended trials, may not be sufficient to the satisfaction of the FDA 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 may decide that our intended pathways, including accelerated approval, are not appropriate for our product candidates, requiring that we conduct additional studies. By example, in recent years the accelerated approval pathway has come under significant FDA and public scrutiny. Accordingly, depending on the results of our studies, the FDA may be more conservative in granting accelerated approval or, if granted, may be more apt to withdrawal approval if clinical benefit is not confirmed. Even if accelerated approval is granted, payors, including governmental payors, may be less welling to provide sufficient reimbursement for products approved via accelerated approval;
- the FDA or comparable foreign regulatory authorities may take longer than we anticipate to make a decision on our product candidates or necessary inspections before an approval can be issued may be delayed;
- we may not be able to demonstrate that a product candidate provides an advantage over current standards of care or current or future competitive therapies in development; and
- we, the third parties on which we rely, and the FDA may have delays in the conduct of our respective operations as a result of the effects of the COVID-19 pandemic, which could result in delays or prevent our ability to receive marketing approval or commercialize our product candidates.

Our development costs will also increase if we experience delays in testing or approvals, and we may not have sufficient funding to complete the testing and approval process for any of our product candidates. We may be required to obtain additional funds to complete clinical trials and prepare for possible commercialization of our product candidates. We do not know whether any preclinical tests or clinical trials beyond what we currently have planned will be required, will begin as

planned, will need to be restructured, or will be completed on schedule, or at all. Significant delays relating to any preclinical or clinical trials also could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our product candidates and may harm our business and results of operations. In addition, many of the factors that cause, or lead to, delays in clinical trials may ultimately lead to the denial of marketing approval of any of our product candidates. If any of these occur, our business, financial condition, results of operations, stock price and prospects may be materially harmed.

We anticipate that our product candidates will be used in combination with third-party drugs, some of which are still in development, and we have limited or no control over the supply, regulatory status, or regulatory approval of such drugs.

Our product candidates may be administered in combination with checkpoint blockade drugs, a class of drugs that are intended to stop tumor cells from "switching off" an immune system attack against themselves. We have entered into agreements with BMS for the supply of nivolumab, its anti-PD-1 therapy, for use in connection with our ongoing IGNYTE Phase 1/2 trials with RP1, our Phase 1/2 clinical trial with RP2 and our Phase 1 and Phase 2 clinical trials with RP3 where we decide to use nivolumab. We have also entered into a clinical collaboration agreement with Regeneron, which includes the supply of cemiplimab, its anti-PD-1 therapy, for clinical trials conducted thereunder. We are enrolling patients in the CERPASS trial, our first planned clinical trial under the Regeneron agreement. We may enter into additional agreements for the supply of anti-PD-1 products for use in combination with and for the continued development of one or more of our product candidates. Our ability to develop and ultimately commercialize our product candidates used in combination with nivolumab, cemiplimab or any other checkpoint blockade therapy will depend on our ability to access such drugs on commercially reasonable terms for the clinical trials and their availability for use with the commercialized product, if approved. We cannot be certain that current or potential future commercial relationships will provide us with a steady supply of such drugs on commercially reasonable terms or at all.

Any failure to maintain or enter into new successful commercial relationships, or the expense of purchasing checkpoint blockade therapies in the market, may delay our development timelines, increase our costs and jeopardize our ability to develop our product candidates as commercially viable therapies. If any of these occur, our business, financial condition, results of operations, stock price and prospects may be materially harmed.

Moreover, the development of our product candidates for use in combination with another product or product candidate may present challenges that are not faced for single agent product candidates. While we have opened a clinical trial for use of RP1 as a monotherapy, we are generally developing RP1 and our other product candidates for use in combination with anti-PD-1 or potentially anti-PD(L)-1 therapies, and may develop RP1 or our other product candidates for use with other therapies. Although we intend our IGNYTE anti-PD-1 failed melanoma cohort and our CERPASS trial to be registration directed, the FDA may require us to use more complex clinical trial designs in order to evaluate the contribution of each product and product candidate to any observed effects. It is possible that the results of these trials could show that any positive previous trial results are attributable to the therapy with which our products were combined and not our product candidates. Moreover, following product approval, the FDA may require that products used in conjunction with each other be cross-labeled for combined use. To the extent that we do not have rights to the other product, this may require us to work with a third party to satisfy such a requirement. Moreover, developments related to the other product may impact our clinical trials for the combination as well as our commercial prospects should we receive marketing approval. Such developments may include changes to the other product's safety or efficacy profile, changes to the availability of the approved product, and changes to the standard of care.

In the event that BMS, Regeneron or any future collaborator or supplier cannot continue to supply their products on commercially reasonable terms or at all, we would need to identify alternatives for accessing an anti-PD-1 therapy. Additionally, should the supply of products from BMS, Regeneron or any future collaborator or supplier be interrupted, delayed or otherwise be unavailable to us, our clinical trials may be delayed, interrupted or halted. In the event we are unable to source a supply of an acceptable alternative anti-PD-1 therapy, or are unable to do so on commercially reasonable terms, our business, financial condition, results of operations, stock price and prospects may be materially harmed.

If we fail to develop additional product candidates, our commercial opportunity could be limited.

Our lead product candidate is RP1. A key part of our strategy is to pursue clinical development of RP1 and additional product candidates, including RP2 and RP3. Developing, obtaining marketing approval for, and commercializing additional product candidates will require substantial additional funding and will be subject to the risks of failure inherent in medical product development. We cannot assure our shareholders that we will be able to successfully advance any of these additional product candidates through the development process.

Even if we obtain approval from the FDA or comparable foreign regulatory authorities to market additional product candidates for the treatment of solid tumors, we cannot assure our shareholders that any such product candidates will be successfully commercialized, widely accepted in the marketplace, or more effective than other commercially available alternatives. If we are unable to successfully develop and commercialize additional product candidates, our commercial opportunity may be limited and our business, financial condition, results of operations, stock price and prospects may be materially harmed.

Risks related to regulatory approval

Even if our development efforts are successful, we may not obtain regulatory approval for any of our product candidates in the United States or other jurisdictions, which would prevent us from commercializing our product candidates. Even if we obtain regulatory approval for our product candidates, any such approval may be subject to limitations, including with respect to the approved indications or patient populations, which could impair our ability to successfully commercialize our product candidates.

We are not permitted to market or promote or sell any of our product candidates before we receive regulatory approval from the FDA or comparable foreign regulatory authorities, and we may never receive such regulatory approval for any of our product candidates. Securing marketing approval requires the submission of extensive preclinical and clinical data and supporting information to regulatory authorities for each therapeutic indication to establish the product candidate's safety and efficacy for that indication. Securing marketing approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities and clinical trial sites by, the regulatory authorities. If we do not receive approval from the FDA and comparable foreign regulatory authorities for any of our product candidates, we will not be able to commercialize such product candidates in the United States or in other jurisdictions. If significant delays in obtaining approval for and commercializing our product candidates occur in any jurisdictions, our business, financial condition, results of operations, stock price and prospects will be materially harmed. Even if our product candidates are approved, they may:

- be subject to limitations on the indicated uses or patient populations for which they may be marketed, distribution restrictions, or other conditions of approval;
- contain significant safety warnings, including boxed warnings, contraindications, and precautions;
- not be approved with label statements necessary or desirable for successful commercialization; or
- contain requirements for costly post-market testing and surveillance, or other requirements, including the submission of a risk evaluation and mitigation strategy, or REMS, to monitor the safety or efficacy of the products.

We have not previously submitted a BLA to the FDA, or a similar marketing application to comparable foreign regulatory authorities, for any product candidate, and we can provide no assurance that we will ultimately be successful in obtaining regulatory approval for claims that are necessary or desirable for successful marketing, or at all.

The regulatory approval processes of the FDA and comparable foreign regulatory authorities are lengthy, time consuming and inherently unpredictable. If we are not able to obtain, or experience delays in obtaining, required regulatory approvals, we will not be able to commercialize our product candidates as expected, and our ability to generate revenue may be materially impaired.

The time required to obtain approval by the FDA and comparable foreign regulatory authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions and there may be varying interpretations of data obtained from preclinical studies or clinical trials, any of which may cause delays or limitations in the approval or a decision not to approve an application. These regulatory requirements may require us to amend our clinical trial protocols, conduct additional preclinical studies or clinical trials that may require regulatory or IRB approval, or otherwise cause delays in the approval or rejection of an application. Any delay in obtaining or failure to obtain required approvals could materially adversely affect our ability to generate revenue from the particular product candidate, which may materially harm our business, financial condition, results of operations, stock price and prospects.

If we experience delays in obtaining approval, if we fail to obtain approval of a product candidate or if the label for a product candidate does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate, the commercial prospects for such product candidate may be harmed and our ability to generate revenues from that product candidate may be materially impaired.

The FDA or a comparable foreign regulatory authority may determine that our product candidates have undesirable side effects that could delay or prevent their regulatory approval or commercialization.

There can be no assurance that undesirable side effects or serious adverse events will not be caused by or associated with RP1 or our other product candidates as they continue through or enter clinical development. Serious adverse events or undesirable side effects caused by our product candidates could cause us, IRBs, and other reviewing entities 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 comparable foreign regulatory authorities. For example, if concerns are raised regarding the safety of a new therapeutic as a result of undesirable side effects identified during clinical or preclinical testing, the FDA or comparable foreign regulatory authority may order us to cease further development, decline to approve the product candidate or issue a letter requesting additional data or information prior to making a final decision regarding whether or not to approve the product candidate. The FDA or comparable foreign regulatory authorities, or IRBs and other reviewing entities, may also require, or we may voluntarily develop, strategies for managing adverse events during clinical development, which could include restrictions on our enrollment criteria, the use of stopping criteria, adjustments to a study's design, or the monitoring of safety data by a data monitoring committee, among other strategies. The FDA or comparable foreign regulatory authority requests for additional data or information could also result in substantial delays in the approval of our product candidates.

Undesirable side effects caused by any of our product candidates could also result in denial of regulatory approval by the FDA or comparable foreign regulatory authorities for any or all targeted indications or the inclusion of unfavorable information in our product labeling, such as limitations on the indicated uses for which the products may be marketed or distributed, a label with significant safety warnings, including boxed warnings, contraindications, and precautions, a label without statements necessary or desirable for successful commercialization, or may result in requirements for costly post-marketing testing and surveillance, or other requirements, including REMS, to monitor the safety or efficacy of the products, and in turn prevent us from commercializing and generating revenues from the sale of our product candidates. Undesirable side effects may limit the potential market for any approved products or could result in the discontinuation of the sales and marketing of the product, or withdrawal of product approvals. Later discovered undesirable side effects may further result in the imposition of a REMS, label revisions, post approval study requirements, or other testing and surveillance.

If any of our product candidates is associated with serious adverse events or undesirable side effects or have properties that are unexpected, we may need to abandon development or limit development of that product candidate to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk/benefit perspective. The therapeutic-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may materially harm our business, financial condition, results of operations, stock price and prospects.

Changes in product candidate manufacturing or formulation may result in additional costs or delay.

As product candidates are developed through preclinical studies to later stage clinical trials towards approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods, facilities, equipment and formulation, are altered along the way in an effort to optimize processes and results. Any of these changes could cause our product candidates to perform differently and affect the results of planned clinical trials or other future clinical trials conducted with the altered materials. Such changes may also require additional testing, or notification to, or approval by the FDA or a comparable foreign regulatory authority. This could delay completion of clinical trials, require the conduct of bridging clinical trials or studies, require the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates and/or jeopardize our ability to commence product sales and generate revenue.

Regulatory approval by the FDA or comparable foreign regulatory authorities is limited to those specific indications and conditions for which approval has been granted, and we may be subject to substantial fines, criminal penalties, injunctions, or other enforcement actions if we are determined to be promoting the use of our products for unapproved or "off label" uses, resulting in damage to our reputation and business.

We must comply with requirements concerning advertising and promotion for any product candidates for which we obtain marketing approval. Promotional communications with respect to therapeutics are subject to a variety of legal and regulatory restrictions and continuing review by the FDA, Department of Justice, Department of Health and Human Services'

Office of Inspector General, state attorneys general, members of Congress, and the public. When the FDA or comparable foreign regulatory authorities issue regulatory approval for a product candidate, the regulatory approval is limited to those specific uses and indications for which a product is approved. If we are not able to obtain FDA approval for desired uses or indications for our product candidates, we may not market or promote them for those indications and uses, referred to as off label uses, and our business, financial condition, results of operations, stock price and prospects may be materially harmed. We also must sufficiently substantiate any claims that we make for our products, including claims comparing our products to other companies' products, and must abide by the FDA's strict requirements regarding the content of promotion and advertising.

While physicians may choose to prescribe products for uses that are not described in the product's labeling and for uses that differ from those tested in clinical trials and approved by the regulatory authorities, we are prohibited from marketing and promoting the products for indications and uses that are not specifically approved by the FDA. These off label uses are common across medical specialties and may constitute an appropriate treatment for some patients in varied circumstances. Regulatory authorities in the United States generally do not restrict or regulate the behavior of physicians in their choice of treatment within the practice of medicine. Regulatory authorities do, however, restrict communications by biopharmaceutical companies concerning off label use.

If we are found to have impermissibly promoted any of our product candidates, we may become subject to significant liability and government fines. The FDA and other agencies actively enforce the laws and regulations regarding product promotion, particularly those prohibiting the promotion of off label uses, and a company that is found to have improperly promoted a product may be subject to significant sanctions. The federal government has levied large civil and criminal fines against companies for alleged improper promotion and has enjoined several companies from engaging in off label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed.

In the United States, engaging in the impermissible promotion of our products, following approval, for off label uses can also subject us to false claims and other litigation under federal and state statutes. These include fraud and abuse and consumer protection laws, which can lead to civil and criminal penalties and fines and agreements with governmental authorities that materially restrict the manner in which we promote or distribute therapeutic products and conduct our business. These restrictions could include corporate integrity agreements, suspension or exclusion from participation in federal and state healthcare programs, and suspension and debarment from government contracts and refusal of orders under existing government contracts. These False Claims Act lawsuits against manufacturers of drugs and biologics have increased significantly in volume and breadth. In addition, False Claims Act lawsuits may expose manufacturers to follow-on claims by private payers based on fraudulent marketing practices. This growth in litigation has increased the risk that a biopharmaceutical company will have to defend a false claim action, pay settlement fines or restitution, as well as criminal and civil penalties, agree to comply with burdensome reporting and compliance obligations, and be excluded from Medicare, Medicaid, or other federal and state healthcare programs. If we do not lawfully promote our approved products, if any, we may become subject to such litigation and, if we do not successfully defend against such actions, those actions may have a material adverse effect on our business, financial condition, results of operations, stock price and prospects.

In the United States, the promotion of biopharmaceutical products is subject to additional FDA requirements and restrictions on promotional statements. If after one or more of our product candidates obtains marketing approval the FDA determines that our promotional activities violate its regulations and policies pertaining to product promotion, it could request that we modify our promotional materials or subject us to regulatory or other enforcement actions, including issuance of warning letters or untitled letters, suspension or withdrawal of an approved product from the market, requests for recalls, payment of civil fines, disgorgement of money, imposition of operating restrictions, injunctions or criminal prosecution, and other enforcement actions. Similarly, industry codes in foreign jurisdictions may prohibit companies from engaging in certain promotional activities and regulatory agencies in various countries may enforce violations of such codes with civil penalties. If we become subject to regulatory and enforcement actions our business, financial condition, results of operations, stock price and prospects will be materially harmed.

Even if our product candidates receive regulatory approval, we will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense and limit how we manufacture and market our products.

Any product candidate for which we obtain marketing approval will be subject to extensive and ongoing requirements of and review by the FDA and comparable foreign regulatory authorities, including requirements related to the manufacturing processes, post approval clinical data, labeling, packaging, distribution, adverse event reporting, shortage reporting, risk management plans, supply chain security, storage, recordkeeping, export, import, advertising, marketing, and promotional activities for such product. These requirements further include submissions of safety and other post-marketing information,

including manufacturing deviations and reports, registration and listing requirements, the payment of annual fees, continued compliance with current Good Manufacturing Practice, or cGMP, requirements relating to manufacturing, quality control, quality assurance, and corresponding maintenance of records and documents, and good clinical practices, or GCPs, for any clinical trials that we conduct post approval.

The FDA and comparable foreign regulatory authorities will continue to closely monitor the safety profile of any product even after approval. If the FDA or comparable foreign regulatory authorities become aware of new safety information after approval of any of our product candidates, they may withdraw approval, issue public safety alerts, require labeling changes or establishment of a REMS or similar strategy, impose significant restrictions on a product's indicated uses or marketing, or impose ongoing requirements for potentially costly post approval studies or post-market surveillance. Any such restrictions could limit sales of the product.

We and any of our suppliers or collaborators, including our contract manufacturers, could be subject to periodic unannounced inspections by the FDA to monitor and ensure compliance with cGMPs and other FDA regulatory requirements. Application holders must further notify the FDA, and depending on the nature of the change, obtain FDA preapproval for product and manufacturing changes.

In addition, later discovery of previously unknown adverse events or that the product is less effective than previously thought or other problems with our products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements both before and after approval, may yield various negative results, including:

- restrictions on manufacturing, distribution, or marketing of such products;
- restrictions on the labeling, including required additional warnings, such as black boxed warnings, contraindications, precautions, and restrictions on the approved indication or use;
- modifications to promotional pieces;
- issuance of corrective information;
- requirements to conduct post-marketing studies or other clinical trials;
- clinical holds or termination of clinical trials;
- requirements to establish or modify a REMS or similar strategy;
- changes to the way the product candidate is administered;
- liability for harm caused to patients or subjects;
- reputational harm;
- the product becoming less competitive;
- warning, untitled, or cyber letters;
- suspension of marketing or withdrawal of the products from the market;
- regulatory authority issuance of safety alerts, Dear Healthcare Provider letters, press releases, or other communications containing warnings or other safety information about the product candidate;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recalls of products;
- fines, restitution or disgorgement of profits or revenues;
- suspension or withdrawal of marketing approvals;

- refusal to permit the import or export of our products;
- product seizure or detention;
- FDA debarment, suspension and debarment from government contracts, and refusal of orders under existing government contracts, exclusion from federal healthcare programs, consent decrees, or corporate integrity agreements; or
- injunctions or the imposition of civil or criminal penalties, including imprisonment.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, or could substantially increase the costs and expenses of commercializing such product, which in turn could delay or prevent us from generating significant revenues from its marketing and sale. Any of these events could further have other material and adverse effects on our operations and business and could adversely impact our business, financial condition, results of operations, stock price and prospects.

The FDA's policies or those of comparable foreign regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates, limit the marketability of our product candidates, or impose additional regulatory obligations on us. Changes in medical practice and standard of care may also impact the marketability of our product candidates.

If we are slow or unable to adapt to changes in existing requirements, standards of care, or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and be subject to regulatory enforcement action.

Should any of the above actions take place, we could be prevented from or significantly delayed in achieving profitability. Further, the cost of compliance with post approval regulations may have a negative effect on our operations and business and could adversely impact our business, financial condition, results of operations, stock price and prospects.

Obtaining and maintaining marketing approval for our product candidates in one jurisdiction would not mean that we will be successful in obtaining marketing approval of that product candidate in other jurisdictions, which could prevent us from marketing our products internationally.

Obtaining and maintaining marketing approval of our product candidates in one jurisdiction would not guarantee that we will be able to obtain or maintain marketing approval in any other jurisdiction, while a failure or delay in obtaining marketing approval in one jurisdiction may have a negative effect on the marketing approval process in others. For example, even if the FDA grants marketing approval of a product candidate, comparable foreign regulatory authorities must also approve the manufacturing, marketing and promotion of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from and, in some cases, greater than, those in the United States, including additional preclinical studies or clinical trials, as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval. Additionally, with the full departure of the United Kingdom from the European Union in January 2021, commonly referred to as Brexit, there is continuing regulatory uncertainty. Since a significant proportion of the regulatory framework in the United Kingdom is derived from European Union directives and regulations, and the degree to which the United Kingdom and European Union regulatory regimes align or diverge could materially impact the execution of our clinical trials or approval of our product candidates in the United Kingdom or the European Union.

Regulatory authorities in jurisdictions outside of the United States have requirements for approval of product candidates with which we must comply prior to marketing in those jurisdictions. Obtaining foreign marketing approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we fail to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed. If we obtain approval for any product candidate and ultimately commercialize that product in foreign markets, we would be subject to additional risks and uncertainties, including the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements and the reduced protection of intellectual property rights in some foreign countries.

Risks related to commercialization

If we are unable to successfully commercialize any product candidate for which we receive regulatory approval, or experience significant delays in doing so, our business will be materially harmed.

If we are successful in obtaining marketing approval from applicable regulatory authorities for RP1 or any of our other product candidates, our ability to generate revenues from our product candidates will depend on our success in:

- launching commercial sales of our product candidates, whether alone or in collaboration with others;
- receiving an approved label with claims that are necessary or desirable for successful marketing, and that does not contain safety or other limitations that would impede our ability to market the product candidates;
- creating market demand for our product candidates through marketing, sales and promotion activities;
- hiring, training, and deploying a sales force or contracting with third parties to commercialize product candidates in the United States;
- manufacturing product candidates in sufficient quantities and at acceptable quality and cost to meet commercial demand at launch and thereafter;
- establishing and maintaining agreements with wholesalers, distributors, and group purchasing organizations on commercially reasonable terms;
- creating partnerships with, or offering licenses to, third parties to promote and sell product candidates in foreign markets where we receive marketing approval;
- maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- our intellectual property position, including the scope of protection we are able to establish and maintain for intellectual property rights covering RP1 and our other product candidates, claims others may make regarding rights in our intellectual property, and any potential infringement, misappropriation or other violation or alleged violation of any third-party intellectual property rights;
- achieving market acceptance of our product candidates by patients, the medical community, and third- party payors;
- achieving appropriate reimbursement for our product candidates;
- effectively competing with other therapies; and
- maintaining a continued acceptable safety profile of our product candidates following launch.

To the extent we are not able to do any of the foregoing, our business, financial condition, results of operations, stock price and prospects will be materially harmed.

We face significant competition from other biopharmaceutical and biotechnology companies, academic institutions, government agencies, and other research organizations, which may result in others discovering, developing or commercializing products more quickly or marketing them more successfully than us. If their product candidates are shown to be safer or more effective than ours, our commercial opportunity may be reduced or eliminated.

The development and commercialization of cancer immunotherapy products is characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary rights. We face competition with respect to our current product candidates, and will face competition with respect to any product candidates that we may seek to develop or commercialize in the future, from major biopharmaceutical companies, specialty biopharmaceutical companies, and biotechnology companies worldwide. There are a number of large biopharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of solid tumors, including oncolytic immunotherapy and cancer vaccine approaches. Potential competitors also include academic institutions, government

agencies, and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and commercialization.

While our product candidates are intended to be used in combination with other drugs with different mechanisms of action, if and when marketed they will still compete with a number of drugs that are currently marketed or in development that also target cancer. To compete effectively with these drugs, our product candidates will need to demonstrate advantages in clinical efficacy and safety compared to these competitors when used alone or in combination with other drugs.

Our commercial opportunities could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are easier to administer or are less expensive alone or in combination with other therapies than any products that we may develop alone or in combination with other therapies. Our competitors also may obtain FDA or comparable foreign regulatory authority approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. In addition, our ability to compete may be affected in many cases by insurers, other third-party payors coverage decisions or third-party intellectual property rights that another may allege are violated by our product candidates.

Certain of the companies with which we are competing or may compete in the future have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do. Mergers and acquisitions in the biopharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in developing or acquiring technologies complementary to, or necessary for, our programs. If we are unable to successfully compete with these companies our business, financial condition, results of operations, stock price and prospects may be materially harmed.

If we are unable to establish effective marketing, sales and distribution capabilities or enter into agreements with third parties to market and sell our product candidates, if they are approved, the revenues that we generate may be limited and we may never become profitable.

We currently do not have a commercial infrastructure for the marketing, sale, and distribution of our product candidates. If and when our product candidates receive marketing approval, we intend to commercialize our product candidates on our own in the United States and potentially with pharmaceutical or biotechnology partners in other geographies. In order to commercialize our products, we must build our marketing, sales, and distribution capabilities or make arrangements with third parties to perform these services. We may not be successful in doing so. Should we decide to move forward in developing our own marketing capabilities, we may incur expenses prior to product launch or even approval in order to recruit a sales force and develop a marketing and sales infrastructure. If a commercial launch is delayed as a result of FDA or comparable foreign regulatory authority requirements or other reasons, we would incur these expenses prior to being able to realize any revenue from sales of our product candidates. Even if we are able to effectively hire a sales force and develop a marketing and sales infrastructure, our sales force and marketing teams may not be successful in commercializing our product candidates. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

We may also or alternatively decide to collaborate with third-party marketing and sales organizations to commercialize any approved product candidates in the United States, in which event, our ability to generate product revenues may be limited. To the extent we rely on third parties to commercialize any products for which we obtain regulatory approval, we may receive less revenues than if we commercialized these products ourselves, which could materially harm our prospects. In addition, we would have less control over the sales efforts of any other third parties involved in our commercialization efforts, and could be held liable if they failed to comply with applicable legal or regulatory requirements.

We have no prior experience in the marketing, sale, and distribution of biopharmaceutical products, and there are significant risks involved in building and managing a commercial infrastructure. The establishment and development of commercial capabilities, including compliance plans, to market any products we may develop will be expensive and time consuming and could delay any product launch, and we may not be able to successfully develop this capability. We will have to compete with other biopharmaceutical and biotechnology companies, including oncology-focused companies, to recruit, hire, train, manage, and retain marketing and sales personnel, which is expensive and time consuming and could delay any product launch. Developing our sales capabilities may also divert resources and management attention away from product development.

In the event we are unable to develop a marketing and sales infrastructure, we may not be able to commercialize our product candidates in the United States or elsewhere, which could limit our ability to generate product revenues and materially harm our business, financial condition, results of operations, stock price and prospects. Factors that may inhibit our efforts to commercialize our product candidates include:

- the inability to recruit, train, manage, and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe our product candidates;
- our inability to effectively oversee a geographically dispersed sales and marketing team;
- the costs associated with training sales and marketing personnel on legal and regulatory compliance matters and monitoring their actions;
- an inability to secure adequate coverage and reimbursement by government and private health plans;
- the clinical indications for which the products are approved and the claims that we may make for the products;
- limitations or warnings, including distribution or use restrictions, contained in the products' approved labeling;
- any distribution and use restrictions imposed by the FDA or comparable foreign regulatory authorities or to which we agree as part of a mandatory REMS or voluntary risk management plan;
- third-party intellectual property rights that another may allege are violated by our product candidates;
- liability for sales or marketing personnel who fail to comply with the applicable legal and regulatory requirements;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization or engaging a contract sales organization.

Our product candidates are based on a novel approach to the treatment of cancer, which makes it difficult to predict the time and cost of product candidate development.

We have concentrated all of our research and development efforts on product candidates based on our proprietary RPx platform, and our future success depends on the successful development of this therapeutic approach. There can be no assurance that any development problems we experience in the future will not cause significant delays or unanticipated costs, or that such development problems can be solved. Should we encounter development problems, including unfavorable preclinical or clinical trial results, the FDA and foreign regulatory authorities may refuse to approve our product candidates, or may require additional information, tests, or trials, which could significantly delay product development and significantly increase our development costs. Moreover, even if we are able to provide the requested information or trials to the FDA, there would be no guarantee that the FDA would accept them or approve our product candidates. We may also experience delays in developing a sustainable, reproducible and scalable manufacturing process, or developing or qualifying and validating product release assays, other testing and manufacturing methods, and our equipment and facilities in a timely manner, which may prevent us from completing our clinical trials or commercializing our product candidates on a timely or profitable basis, if at all.

In addition, the clinical trial requirements of the FDA and comparable foreign regulatory authorities and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use and market of the potential products. The FDA and comparable foreign regulatory authorities have limited experience with the approval of oncolytic immunotherapies. Only one oncolytic immunotherapy, T-Vec, has received FDA approval to date. Any product candidates that are approved may be subject to extensive post approval regulatory requirements, including requirements pertaining to manufacturing, distribution, and promotion. We may need to devote significant time and resources to compliance with these requirements.

If our product candidates do not achieve broad market acceptance, the revenues that we generate from their sales may be limited, and we may never become profitable.

We have never commercialized a product candidate for any indication. Even if our product candidates are approved by the appropriate regulatory authorities for marketing and sale, they may not gain acceptance among physicians, patients, third-party payors, and others in the medical community. If any product candidates for which we obtain regulatory approval do not gain an adequate level of market acceptance, we could be prevented from or significantly delayed in achieving profitability. Market acceptance of our product candidates by the medical community, patients, and third-party payors will depend on a number of factors, some of which are beyond our control. For example, physicians are often reluctant to switch their patients and patients may be reluctant to switch from existing therapies even when new and potentially more effective or safer treatments enter the market.

Efforts to educate the medical community and third party payors on the benefits of our product candidates may require significant resources and may not be successful. If any of our product candidates is approved but does not achieve an adequate level of market acceptance, we could be prevented from or significantly delayed in achieving profitability. The degree of market acceptance of any of our product candidates will depend on a number of factors, including:

- the efficacy of our product candidates in combination with marketed checkpoint blockade drugs;
- the commercial success of the checkpoint blockade drugs with which our products are co-administered;
- the prevalence and severity of adverse events associated with our product candidates or those products with which they are co-administered;
- the clinical indications for which the products are approved and the approved claims that we may make for the products;
- limitations or warnings contained in the product's FDA-approved labeling or those of comparable foreign regulatory authorities, including potential limitations or warnings for our product candidates that may be more restrictive than other competitive products;
- changes in the standard of care for the targeted indications for our product candidates, which could reduce the marketing impact of any claims that we could make following FDA approval or approval by comparable foreign regulatory authorities, if obtained;
- the relative convenience and ease of administration of our product candidates by direct injection into tumors, a less common method for the administration of oncology therapies than systemic administration, which may result in slower adoption of our therapies;
- the relative convenience and ease of administration of any products with which our product candidates are co-administered;
- the cost of treatment compared with the economic and clinical benefit of alternative treatments or therapies;
- the availability of adequate coverage or reimbursement by third parties, such as insurance companies and other healthcare payors, and by government healthcare programs, including Medicare and Medicaid;
- the price concessions required by third-party payors to obtain coverage;
- the extent and strength of our marketing and distribution of our product candidates;
- the safety, efficacy, and other potential advantages over, and availability of, alternative treatments already used or that may later be approved;
- distribution and use restrictions imposed by the FDA or comparable foreign regulatory authorities with respect to our product candidates or to which we agree as part of a REMS or voluntary risk management plan;
- the timing of market introduction of our product candidates, as well as competitive products;
- our ability to offer our product candidates for sale at competitive prices;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;

- the extent and strength of our manufacturing operations and our third-party manufacturer and supplier support;
- the actions of companies that market any products with which our product candidates are co-administered;
- the approval of other new products;
- adverse publicity about our product candidates or any products with which they are co-administered, or favorable publicity about competitive products; and
- potential product liability claims.

The size of the potential market for our product candidates is difficult to estimate and, if any of our assumptions are inaccurate, the actual markets for our product candidates may be smaller than our estimates.

The potential market opportunities for our product candidates are difficult to estimate and will depend in large part on the drugs with which our product candidates are co-administered and the success of competing therapies and therapeutic approaches. In particular, the market opportunity for oncolytic immunotherapies is hard to estimate given that it is an emerging field with only one existing FDA-approved oncolytic immunotherapy, T-Vec, which has yet to enjoy broad market acceptance. Our estimates of the potential market opportunities are predicated on many assumptions, which may include industry knowledge and publications, third-party research reports, and other surveys. Although we believe that our internal assumptions are reasonable, these assumptions involve the exercise of significant judgment on the part of our management, are inherently uncertain, and their reasonableness has not been assessed by an independent source. If any of the assumptions proves to be inaccurate, the actual markets for our product candidates could be smaller than our estimates of the potential market opportunities.

Negative developments in the field of immuno-oncology could damage public perception of our product candidates and negatively affect our business.

The commercial success of our product candidates will depend in part on public acceptance of the use of cancer immunotherapies. Adverse events in clinical trials of RP1 or our other product candidates or in clinical trials of others developing similar products and the resulting publicity, as well as any other negative developments in the field of immuno-oncology that may occur in the future, including in connection with competitor therapies, could result in a decrease in demand for our product candidates. These events could also result in the suspension, discontinuation, or clinical hold of or modification to our clinical trials. If public perception is influenced by claims that the use of cancer immunotherapies is unsafe, whether related to our therapies or those of our competitors, our product candidates may not be accepted by the general public or the medical community and potential clinical trial subjects may be discouraged from enrolling in our clinical trials. As a result, we may not be able to continue or may be delayed in conducting our development programs.

As our product candidates consist of a modified virus, adverse developments in antiviral vaccines or clinical trials of other oncolytic immunotherapy products based on viruses may result in a disproportionately negative effect for our product candidates as compared to other products in the field of immuno-oncology that are not based on viruses. Future negative developments in the field of immuno-oncology or the biopharmaceutical industry could also result in greater governmental regulation, stricter labeling requirements and potential regulatory delays in the testing or approvals of our products. Any increased scrutiny could delay or increase the costs of obtaining marketing approval for our product candidates.

Risks related to our financial position and need for additional capital

We are a clinical stage biopharmaceutical company with a very limited operating history. We have incurred net losses since our inception and anticipate that we will continue to incur substantial and increasing net losses in the foreseeable future. We may never achieve or sustain profitability.

We are a clinical stage biopharmaceutical company with a limited operating history, and we are early in our development efforts. We have no products approved for commercial sale and have not generated any revenue from product sales to date, and we continue to incur significant research and development and other expenses related to our ongoing operations. 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 marketing approval and become commercially viable. We have financed our operations to date primarily through the sale of equity securities, including the sale of our common stock and pre-funded warrants in our public offerings. Since our inception, most of our resources have been dedicated to the preclinical and clinical development of our

proprietary RPx platform, including our lead product candidate, RP1, and our other product candidates. The size of our future net losses will depend, in part, on our future expenses and our ability to generate revenue, if any.

We are not profitable and have incurred losses in each period since our inception. For the three months ended September 30, 2022 and 2021, we reported a net loss of $43.1 million and $29.4 million, respectively. At September 30, 2022, we had an accumulated deficit of $396.6 million. We expect to continue to incur significant losses for the foreseeable future, and we expect these losses to increase as we continue our research and development of, and seek marketing approvals for, RP1, our other product candidates and any additional product candidates we may develop.

Even if we succeed in receiving marketing approval for and commercialize RP1 or our other product candidates, we will continue to incur substantial research and development and other expenditures to develop and market additional potential products. We may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may adversely affect our business. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

We have never generated any revenue from product sales, and our ability to generate revenue from product sales and become profitable will depend significantly on our success in achieving a number of goals.

We have no products approved for commercial sale, have not generated any revenue from product sales, and do not anticipate generating any revenue from product sales until after we have received marketing approval for the commercial sale of a product candidate, if ever. Our ability to generate revenue and achieve profitability depends significantly on our success in achieving a number of goals, including:

- completing research regarding, and preclinical and clinical development of, RP1 and our other product candidates;
- obtaining marketing approvals for RP1 and our other product candidates for which we complete clinical trials;
- developing a sustainable and scalable manufacturing process for RP1 and our other product candidates, including establishing and maintaining commercially viable supply and manufacturing relationships with third parties;
- launching and commercializing RP1 and our other product candidates for which we obtain marketing approvals, either directly or with a collaborator or distributor;
- obtaining market acceptance of RP1 and our other product candidates as viable treatment options;
- addressing any competing technological and market developments;
- identifying, assessing, acquiring and developing new product candidates;
- negotiating favorable terms in any collaboration, licensing, or other arrangements into which we may enter;
- obtaining, maintaining, protecting, and expanding our portfolio of intellectual property rights, including patents, trade secrets, and know-how; and
- attracting, hiring, and retaining qualified personnel.

Even if our product candidates or any future product candidates that we develop are approved for commercial sale, we anticipate incurring significant costs associated with commercializing any such product candidate. Our expenses could increase beyond expectations if we are required by the FDA or comparable foreign regulatory authorities to change our manufacturing processes or assays, or to perform clinical, nonclinical, or other types of studies in addition to those that we currently anticipate.

If we are successful in obtaining regulatory approvals to market RP1 or our other product candidates, our revenue will be dependent, in part, upon the size of the markets in the territories for which we gain marketing approval, the accepted price for the product, the ability to get reimbursement at any price, and whether we own the commercial rights for that territory. If the number of our addressable patients is not as significant as we estimate, the indication approved by regulatory authorities is narrower than we expect, the labels for our product candidates contain significant safety warnings, regulatory authorities impose burdensome or restrictive distribution requirements, or the reasonably accepted patient population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of such

products, even if approved. If we are not able to generate revenue from the sale of any approved products, we could be prevented from or significantly delayed in achieving profitability.

We will require additional financing to achieve our goals, and a failure to obtain this necessary capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development or commercialization efforts.

Our operations have consumed substantial amounts of cash since inception. At September 30, 2022, our cash and cash equivalents and short-term investments were $371.8 million. We expect to continue to spend substantial amounts to continue the clinical and preclinical development of RP1 and our other product candidates. Accordingly, we will need to obtain additional funds to achieve our business objectives. If we are able to gain marketing approval of any product candidate, we will require significant additional amounts of cash in order to launch and commercialize such product. In addition, other unanticipated costs may arise.

Our future capital requirements depend on many factors, including:

- the scope, progress, results and costs of researching and developing RP1 and our other product candidates, and conducting preclinical studies and clinical trials;
- the timing of, and the costs involved in, obtaining marketing approvals for RP1 and our other product candidates if clinical trials are successful;
- the success of any collaborations;
- the cost of commercialization activities for any approved product, including marketing, sales and distribution costs;
- the cost and timing of operating our manufacturing facility;
- the cost of manufacturing RP1 and our other product candidates for clinical trials in preparation for marketing approval and commercialization;
- our ability to establish and maintain strategic licensing or other arrangements and the financial terms of such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, expanding, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;
- the timing, receipt, and amount of sales of, or royalties on, our future products, if any; and
- the emergence of competing cancer therapies and other adverse market developments.

We do not have any committed external source of funds or other support for our development efforts. Until we can generate sufficient product revenue to finance our cash requirements, which we may never do, we expect to finance our future cash needs through a combination of public or private equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing or distribution arrangements. Based on our research and development plans, we expect that our existing cash and cash equivalents and short-term investments will enable us to fund our planned operating expenses and capital expenditure requirements into the second half of calendar 2024, excluding any confirmatory trial required by the FDA or other regulatory body. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. In addition, because the design and outcome of our planned and anticipated clinical trials is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of RP1 or our other product candidates.

Risks related to intellectual property

If we are unable to obtain, maintain and protect our intellectual property rights for our technology and product candidates, or if our intellectual property rights are inadequate, our competitive position could be harmed.

Our commercial success will depend in part on our ability to obtain and maintain patent and other intellectual property protection in the United States and other countries with respect to our technology, proprietary RPx platform, including our lead product candidate, RP1, and our other product candidates. We rely on trade secret, patent, copyright and trademark laws, and confidentiality, licensing and other agreements with employees and third parties, all of which offer only limited protection.

The patent positions of biotechnology and pharmaceutical companies generally are highly uncertain, involve complex legal and factual questions and have in recent years been the subject of much litigation and subject to change with regulatory agencies and court decisions. As a result, the issuance, scope, validity, enforceability and commercial value of our licensed patents and any patents we own in the future are highly uncertain. The steps we have taken to protect our proprietary rights may not be adequate to preclude misappropriation of our proprietary information, use by third parties of our products or infringement of our intellectual property rights, both inside and outside of the United States.

Our pending applications cannot be enforced against third parties practicing the inventions claimed in such applications unless and until a patent issues from such applications. Because the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, our issued patents and issued patents that we license from third parties or may own have been and in the future may be challenged in the courts or patent offices in the United States and abroad. Further, the examination process may require us to narrow the claims for our pending patent applications, which may limit the scope of patent protection that may be obtained if these applications issue. The scope of a patent may also be interpreted or reinterpreted after issuance. The rights that may be granted under our future issued patents may not provide us with the proprietary protection or competitive advantages we are seeking. In addition, defending against challenges in respect of the inventorship, scope, validity or enforceability of our patents may be expensive, time consuming, difficult and in some cases may not be possible. Although we enter into nondisclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, collaborators, and other third parties, any of these parties may breach the agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. In addition, the patent prosecution process is expensive, time consuming and complex, and we may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. If we are unable to obtain and maintain patent protection for our technology or inventions, or for RP1 or our other product candidates, or if the scope of the patent protection obtained is not sufficient, our competitors could develop and commercialize products similar or superior to ours, and our ability to successfully commercialize RP1 or our other product candidates and future technologies or inventions may be adversely affected.

Patent terms may be inadequate to protect our competitive position on our products for an adequate amount of time, and our product candidates for which we intend to seek approval as biological products may face competition sooner than anticipated. Given the amount of time required for the development, testing and regulatory review of our product candidates, such as RP1 and our other product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized.

Filing, prosecuting and defending patents on our technology or inventions in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries or religions outside the United States can be less protective of our products than those in the United States. In addition, the laws and practices of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Changes to the patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect RP1 and our other product candidates. 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 or inventions in jurisdictions where we have not obtained patent protection to develop and/or manufacture their own products and may export otherwise infringing products to territories where we have patent protection but where enforcement is not as strong as that in the United States. These products may compete with our products and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Protecting against the unauthorized use of our patented inventions, trademarks and other intellectual property rights is expensive, time consuming, difficult and in some cases may not be possible. In some cases, it may be difficult or impossible to detect third-party infringement or misappropriation of our intellectual property rights, even in relation to issued patent claims, and proving any such infringement or misappropriation may be even more difficult. If we are unable to obtain, maintain, and protect our intellectual property our competitive advantage could be harmed, and it could result in a material adverse effect on our business, financial condition, results of operations, stock price and prospects.

In addition to seeking patent protection, we also rely on other proprietary rights, including protection of trade secrets, know-how and confidential and proprietary information. Although we enter into confidentiality agreements with our

employees, consultants, collaborators, suppliers, manufacturers and other third parties who have access to our trade secrets, and our agreements with employees also provide that any inventions conceived by the individual in the course of rendering services to us shall be our exclusive property, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms or may have conflicting agreements with third parties. In addition, in the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information. To the extent that our employees, consultants or contractors use technology or know-how owned by third parties in their work for us, disputes may arise between us and those third parties as to the rights in related inventions. If any of our trade secrets, know-how or confidential or proprietary information were to be lawfully obtained, patented or independently developed by a competitor or other third party, we would have no right to prevent them from using that technology or information to compete with us and may be blocked from using such trade secrets, know-how or confidential or proprietary information ourselves. The disclosure of our trade secrets or the independent development of our trade secrets by a competitor or other third party would impair our competitive position and may materially harm our business, financial condition, results of operations, stock price and prospects.

Third parties may in the future initiate legal proceedings alleging that we are infringing their intellectual property rights, and we may become involved in lawsuits or other administrative procedures to protect or enforce our intellectual property, which could be expensive, time consuming and unsuccessful and have a material adverse effect on the success of our business.

Our commercial success depends on our ability and the ability of our current or future collaborators to develop, manufacture, market and sell RP1 and our other product candidates, and to use our related proprietary technologies without infringing, misappropriating or otherwise violating the intellectual property and proprietary rights of third parties. The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. We may become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our current and any other future product candidates. For example, we are aware of U.S. Patent 10,034,938 (the ‘938 Patent) held by Amgen Inc., which includes claims purported to cover methods and kits for treating stage IIIb to IV melanoma by the administration of (i) an effective amount of an anti-PD-1 antibody or anti-CTLA-4 antibody; and (ii) a herpes simplex virus, wherein the herpes simplex virus lacks a functional ICP34.5 encoding gene and a functional ICP47 encoding gene, and comprises a gene encoding human GM-CSF. We believe the USPTO erred in its issuance of the ‘938 Patent for at least the reason that the invention covered by the claims of the ‘938 Patent was in the public domain prior to the filing date of the '938 Patent, and accordingly on November 2, 2022, we filed a petition for inter partes review with the Patent Trial and Appeal Board (PTAB) of the USPTO, seeking to invalidate certain claims of United States Patent 10,034,938 (the ‘938 Patent).

Third parties may assert infringement or other intellectual property claims against us based on existing patents or patents that may be filed and/or granted in the future. At times we may attempt to initiate litigation or other administrative procedures to invalidate or otherwise limit the scope of a third party’s intellectual property and these attempts may not be successful. If we are found to infringe a third party’s intellectual property rights, and we are unsuccessful in demonstrating that such intellectual property rights are invalid, unenforceable or otherwise not infringed, we could be required to obtain a license from such third-party to continue developing, manufacturing and commercializing RP1 and our other product candidates. Such a license may not be available on commercially reasonable terms, or at all. Even if we were able to obtain a license, it could be nonexclusive, thereby giving our competitors and other third parties access to the same technologies and inventions licensed to us, and it could require us to make substantial licensing and royalty payments. We also could be forced, including by court order, to cease developing, manufacturing, and commercializing RP1 or our other product candidates or we could be found liable for significant monetary damages if we are found to have willfully infringed a patent or other intellectual property right. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations, stock price and prospects. Any claims by third parties that we have misappropriated their know-how, confidential or proprietary information or trade secrets could have a similar material adverse effect on our business, financial condition, results of operations, stock price and prospects.

If we or one of our licensing partners initiate legal proceedings against a third party to enforce a patent covering any of our technology or inventions, the defendant could counterclaim that the patent covering our product candidate is invalid or unenforceable. If a third party were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on RP1 and our other product candidates. Such a loss of patent protection could have a material adverse impact on our business, financial condition, results of operations, stock price and prospects.

Many of our employees, including our senior management team, were previously employed at, or consulted for, universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we take steps to ensure that our employees do not use, claim as theirs, or misappropriate the intellectual property, confidential or proprietary information, know-how or trade secrets of others in their work for us, we may be subject to claims that we or these employees have used, claimed as theirs, misappropriated or disclosed intellectual property, including trade secrets, know-

how or other confidential or proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third-party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms, or at all.

In addition, we are developing certain of our product candidates in combination with nivolumab and cemiplimab, which are covered by patents or licenses held by BMS and Regeneron, respectively, to which we do not have a license other than for use in connection with the applicable clinical trial. We also may develop our product candidates in combination with products developed by additional companies that are covered by patents or licenses held by those entities to which we do not have a license. In the event that a labeling instruction is required in product packaging recommending that combination, we could be accused of, or held liable for, infringement of the third-party patents covering the product candidate or product recommended for administration with RP1 or our other product candidates. In such a case, we could be required to obtain a license from the other company or institution to use the required or desired package labeling, which license may not be available on commercially reasonable terms, or at all.

Competitors may infringe any future licensed patents or any patent we own in the future or misappropriate or otherwise violate our intellectual property rights. We may also be required to defend against claims of infringement and our licensed patents and any patents we own in the future may become involved in priority or other intellectual property related disputes. To counter infringement or unauthorized use, litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of our own intellectual property rights or the proprietary rights of others.

These proceedings can be expensive and time consuming. Many of our current and potential competitors have the ability to dedicate substantially greater resources to conduct intellectual property related litigation or proceedings than we can. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property. An adverse result in any litigation or other intellectual property related proceeding could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation in the United States, there is a risk that some of our trade secrets, know-how, or proprietary or confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments in any such proceedings. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of shares of our common stock. Any of the foregoing may have a material adverse effect on our business, financial condition, results of operations, stock price and prospects.

Risks related to manufacturing and our reliance on third parties

We have agreements with BMS and Regeneron, and in the future may have agreements with other companies, to obtain the supply of anti-PD-1 therapies for the development of our product candidates. If our relationships with BMS, Regeneron, or any future collaborator or supplier are not successful, we may be delayed in completing the development of our product candidates.

We have entered into arrangements with BMS and Regeneron as part of our clinical development for RP1, RP2 and RP3 for where nivolumab or cemiplimab, respectively, are intended to be used for these clinical programs. BMS is providing nivolumab, its anti-PD-1 therapy, for use in our ongoing IGNYTE Phase 1/2 trials with RP1, our Phase 1/2 clinical trial with RP2 and our Phase 1 and Phase 2 clinical trials with RP3 where we intend to use nivolumab and may potentially do so for other clinical trials in the future; Regeneron is providing cemiplimab, its anti-PD-1 therapy, for use in our ongoing CERPASS Phase 2 clinical trial and may potentially do so for other clinical trials in the future. As described in Note 10 to the consolidated financial statements appearing elsewhere in this Quarterly Report, we are currently in communication with Regeneron in respect to receiving Regeneron's acknowledgement of the sharing of the study costs according to the current budget that superseded that of the initial study plan and initial budget.

We may also enter into agreements with additional companies for the supply of anti-PD-1 therapies for use in the development of RP1 and our other product candidates. The outcome of these clinical trials is dependent, in part, both on the performance of our partners' products and product candidates and also on our partners' ability to deliver sufficient quantities of adequately produced product. Should any of our partners' products or product candidates fail to produce the results that we anticipate, we may have to re-run clinical trials for RP1 or our other product candidates or may otherwise be delayed in the commercialization of RP1 or our other product candidates. Similarly, should any partner fail to provide us with a product or product candidate that suits our requirements, we may have to re-run clinical trials for RP1 or our other product candidates or may be otherwise delayed in the commercialization of RP1 or our other product candidates. Additionally, we are subject to

specific risks associated with our collaboration partners, including possible discrepancies as to the timing, nature and the extent of development plans, contract interpretations, and the costs and allocation of costs related to the conduct of our clinical trials. If we and any collaboration partner are unable to agree or fail to perform our respective obligations or effectively manage our relationship, our clinical trials performed under such collaboration could incur additional costs, be delayed or could result in costly or time-consuming legal proceedings that could have an adverse effect on a collaboration or on our business.

Our collaboration agreements with any future partners may not be successful, which could adversely affect our ability to develop and commercialize our product candidates.

We may in the future seek collaboration arrangements with other parties for the development or commercialization of our product candidates. The success of any collaboration arrangements may depend on the efforts and activities of our collaborators. Collaborators generally have significant discretion in determining the efforts and resources that they will apply to these arrangements. Disagreements between parties to a collaboration arrangement regarding clinical development and commercialization matters can lead to delays in the development process or commercializing the applicable product candidate and, in some cases, termination of the collaboration arrangement.

Collaborations with biopharmaceutical companies and other third parties often are terminated or allowed to expire by the other party. Any such termination or expiration could adversely affect us financially and could harm our business reputation.

Any future collaborations we might enter into may pose a number of risks, including the following:

- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could fail to make timely regulatory submissions for a product candidate;
- collaborators may not comply with all applicable regulatory requirements or may fail to report safety data in accordance with all applicable regulatory requirements, which could subject them or us to regulatory enforcement actions;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- a collaborator with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product candidate or product;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or termination of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time consuming and expensive;

- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation; and

- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability.

If any collaborations we might enter into in the future do not result in the successful development and commercialization of products or if one of our collaborators subsequently terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under such potential future collaboration. If we do not receive the funding we expect under the agreements, our development of our product candidates could be delayed and we may need additional resources to develop our product candidates and our product platform.

Additionally, if any future collaborator of ours is involved in a business combination, the collaborator might de-emphasize or terminate development or commercialization of any product candidate it licenses to us. If one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and our reputation in the business and financial communities could be adversely affected.

We face significant competition in seeking appropriate collaborators. Our ability to reach a definitive agreement for any collaboration will depend upon, among other things, our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors.

If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms, or at all, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms, or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop our product candidates or bring them to market or continue to develop our product platform and our business may be materially and adversely affected.

We rely, and expect to continue to rely, on third parties to conduct, supervise, and monitor our preclinical studies and clinical trials. If those third parties do not perform satisfactorily, including failing to meet deadlines for the completion of such trials or failing to comply with regulatory requirements, we may be unable to obtain regulatory approval for our product candidates or any other product candidates that we may develop in the future.

We rely on third-party CROs, study sites, and others to conduct, supervise, and monitor our preclinical studies and clinical trials for our product candidates and do not currently plan to independently conduct preclinical studies or clinical trials of any other potential product candidates. We expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions, and clinical investigators, to conduct our preclinical studies and clinical trials. Although we have agreements governing their activities, we have limited influence over their actual performance and control only certain aspects of their activities. The failure of these third parties to successfully carry out their contractual duties or meet expected deadlines could substantially harm our business because we may be delayed in completing or unable to complete the studies required to support future approval of our product candidates, or we may not obtain marketing approval for or commercialize our product candidates in a timely manner or at all. Moreover, these agreements might terminate for a variety of reasons, including a failure to perform by the third parties. If we need to enter into alternative arrangements our product development activities would be delayed and our business, financial condition, results of operations, stock price and prospects may be materially harmed.

Our reliance on these third parties for development activities will reduce our control over these activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory, and scientific standards and our reliance on third parties does not relieve us of our regulatory responsibilities. For example, we will remain responsible for ensuring that each of our trials is conducted in accordance with the general investigational plan and protocols for the trial. We must also ensure that our preclinical trials are conducted in accordance with the FDA's Good Laboratory Practice, or GLP, regulations, as appropriate. Moreover, the FDA and comparable foreign regulatory authorities require us to comply with standards, commonly referred to as GCPs for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. Regulatory authorities enforce these requirements through

periodic inspections of trial sponsors, clinical investigators, and trial sites. If we or any of our third parties fail to comply with applicable GCPs or other regulatory requirements, we or they may be subject to enforcement or other legal actions, the data generated in our trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional studies. In addition, our clinical trials must be conducted with product candidates that were produced under cGMP regulations. Failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our preclinical studies or clinical trials in accordance with regulatory requirements or our stated protocols, if they need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our protocols, regulatory requirements or for other reasons, our trials may be repeated, extended, delayed, or terminated; we may not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates; we may not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates, or we or they may be subject to regulatory enforcement actions. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed. To the extent we are unable to successfully identify and manage the performance of third-party service providers in the future, our business, financial condition, results of operations, stock price and prospects may be materially harmed.

If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative providers or to do so on commercially reasonable terms. Switching or adding additional third parties involves additional cost and may result in delays that could compromise our ability to meet our desired development timelines.

We also rely on other third parties to store and distribute our products for the clinical trials that we conduct. Any performance failure on the part of our distributors could delay clinical development, marketing approval, or commercialization of our product candidates, which could result in additional losses and deprive us of potential product revenue.

If the manufacturers upon which we rely fail to produce our raw materials or product candidates in the volumes that we require on a timely basis, or fail to comply with stringent regulations applicable to biopharmaceutical manufacturers, we may face delays in the development and commercialization of, or be unable to meet demand for, our product candidates and may lose potential revenues.

We continue to rely on third-party contract manufacturers to manufacture our raw materials and clinical trial product supplies until our in-house manufactured clinical trial product supplies are qualified for use in our clinical trials. As a result, there can be no assurance that our clinical development will not be limited, interrupted, or of satisfactory quality or continue to be available at acceptable prices.

We currently have only one contract manufacturer for our product candidates for use in our clinical trials until our in-house materials are qualified for use in our clinical trials. In addition, we do not have any long-term commitments from our suppliers of raw materials or clinical trial material or guaranteed prices for our product candidates or their components. There are a limited number of manufacturers that operate under cGMP regulations and that are both capable of manufacturing and filling our viral product for us and willing to do so. If our existing third-party manufacturers of raw materials or our product candidates, or the third parties that we engage in the future, should cease to work with us, we likely would experience delays in obtaining sufficient quantities of our product candidates for us to meet commercial demand or to advance our clinical trials while we identify and qualify replacement suppliers. Any replacement of our contract manufacturer could require significant effort and expertise because there may be a limited number of qualified replacements. Any delays in obtaining adequate supplies of our raw materials or product candidates that meet the necessary quality standards may delay our development or commercialization.

If our manufacturers do not perform as agreed or encounter difficulties in production costs and yields, quality control, shortages of qualified personnel or key raw materials, compliance with strictly enforced federal, state, and foreign regulations, or other difficulties, our ability to provide product candidates to patients in our clinical trials could be jeopardized.

In addition, if our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or other regulatory authorities, they will not be able to secure or maintain regulatory approval for their manufacturing facilities. Any such deviations may also require remedial measures that may be costly and/or time consuming for us or a third party to implement and that may include the temporary or permanent suspension of a clinical trial or the temporary or permanent closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business. Any delays in obtaining raw materials, products or product

candidates that comply with the applicable regulatory requirements may result in delays to clinical trials, product approvals, and commercialization.

While we are ultimately responsible for the manufacturing of our product candidates and therapeutic substances, other than through our contractual arrangements, we have little control over our manufacturers' compliance with these regulations and standards. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved. We must also receive FDA approval for the use of any new manufacturers for clinical or commercial supply, including our own manufacturing facility.

A failure to comply with the applicable regulatory requirements, including periodic regulatory inspections, may result in regulatory enforcement actions against our manufacturers or us (including fines and civil and criminal penalties, including imprisonment) suspension or restrictions of production, injunctions, delay or denial of product approval or supplements to approved products, clinical holds or termination of clinical trials, warning or untitled letters, regulatory authority communications warning the public about safety issues with the product candidate, refusal to permit the import or export of the products, product seizure, detention, or recall, operating restrictions, suits under the civil False Claims Act, corporate integrity agreements, consent decrees, withdrawal of product approval, environmental or safety incidents and other liabilities. If the safety of any quantities supplied is compromised due to our manufacturers' failure to adhere to applicable laws or for other reasons, we may not be able to obtain regulatory approval for or successfully commercialize our product candidates.

The transition of our manufacturing operations to our new facility may result in further delays or expenses, and we may not experience the anticipated operating efficiencies.

Our approximately 63,000 square foot manufacturing facility in Framingham, Massachusetts is now fully operational. The process of transferring the manufacturing of RP1 and RP2 from our third-party contract manufacturer is complete and the transfer of the manufacturing of RP3 from our third-party contract manufacturer is nearly complete. Comparability analysis of RP1 produced at our Framingham facility with the contract manufacturer material used in our clinical studies is complete and a report has been submitted to the FDA. Comparability studies of RP2 manufactured from our in-house facility to our current clinical trial supply material manufactured from our third-party contract manufacturer are underway. This facility is intended to give us control over key aspects of the supply chain for our products and product candidates. However, we may not experience the direct transfer of manufacturing processes or the anticipated operating efficiencies as we commence manufacturing operations at the new facility. Any such delays may disrupt or delay the supply of our product candidates if we have not maintained a sufficient backup supply of our product candidates through third-party manufacturers. Moreover, changing manufacturing facilities may also require that we conduct additional studies, make notifications to the regulatory authorities, make additional filings to the regulatory authorities, and obtain regulatory authority approval for the new facilities, which may be delayed or which we may never receive. We will further need to comply with the FDA's and applicable foreign regulatory authorities' cGMP requirements for the production of our product candidates for clinical trials and, if approved, commercial supply, and will be subject to FDA and comparable foreign regulatory authority inspections. We may not be able to develop or acquire the internal expertise and resources necessary for compliance with these requirements. If we are not able to comply with the applicable regulatory requirements or produce product that meets our requirements and specifications, we will be subject to the same risks that we would be subject to should third party manufacturers be unable to comply with the applicable regulatory requirements or produce product meeting our requirements or specifications, as described above. If we fail to achieve the operating efficiencies that we anticipate, our manufacturing and operating costs may be greater than expected, which could have a material adverse impact on our operating results.

In operating our own manufacturing facility, we may be forced to devote greater resources and management time than anticipated, particularly in areas relating to operations, quality, raw material supply, regulatory, facilities and information technology. Further, should corrective or preventative actions be required, we will be fully responsible for these. If we experience unanticipated employee turnover in any of these areas, we may not be able to effectively manage our ongoing manufacturing operations and we may not achieve the operating efficiencies that we anticipate from the new facility, which may negatively affect our product development timeline, product candidate supplies and, if approved, our commercial product
supplies. If we experience any unanticipated shortages of key raw materials, or other difficulties related to our raw material supply, we may not be able to effectively manage our ongoing manufacturing timelines and costs which may negatively affect our product development schedule and our ability to provide clinical trial supplies to patients in our clinical trials, and if approved, our commercial product supplies.

Any problems or delays we experience in preparing for commercial scale manufacturing of a product candidate or component may result in a delay in product development timelines and FDA or comparable foreign regulatory authority

approval of the product candidate or may impair our ability to manufacture commercial quantities or such quantities at an acceptable cost and quality, which could result in the delay, prevention, or impairment of clinical development and commercialization of our product candidates and may materially harm our business, financial condition, results of operations, stock price and prospects.

Any such problems could result in the delay, prevention, or impairment of clinical development and commercialization of our product candidates and may materially harm our business, financial condition, results of operations, stock price and prospects.

Risks related to legal and compliance matters

We face potential product liability exposure, and if successful claims are brought against us, we may incur substantial liability and have to limit the commercialization of any approved products and/or our product candidates.

The use of our product candidates in clinical trials, and the sale of any product for which we obtain regulatory approval, exposes us to the risk of product liability claims. We face inherent risk of product liability related to the testing of our product candidates in human clinical trials, including liability relating to the actions and negligence of our investigators, and will face an even greater risk if we commercially sell any product candidates that we may develop. 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. Product liability claims might be brought against us by consumers, healthcare providers or others using, administering or selling our products. If we cannot successfully defend ourselves against these claims, we will 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 merit or eventual outcome, liability claims may result in:

- loss of revenue from decreased demand for our products and/or product candidates;
- impairment of our business reputation or financial stability;
- costs of related litigation;
- substantial monetary awards to patients or other claimants;
- diversion of management attention;
- withdrawal of clinical trial participants and potential termination of clinical trial sites or entire clinical programs;
- the inability to commercialize our product candidates;
- significant negative media attention;
- decreases in our stock price;
- initiation of investigations and enforcement actions by regulators; and
- product recalls, withdrawals or labeling, marketing or promotional restrictions, including withdrawal of marketing approval.

We believe we have sufficient insurance coverage in place for our business operations. However, our insurance coverage may not reimburse us or may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. We intend to expand our insurance coverage to include the sale of commercial products if we obtain FDA or comparable foreign regulatory approval for our product candidates in development, but we may be unable to obtain commercially reasonable product liability insurance for any products approved for marketing, or at all. Failure to obtain and retain sufficient product liability insurance at an acceptable cost could prevent or inhibit the commercialization of products we develop. A successful product liability claim or series of claims brought against us could cause our stock price to fall and, if judgments exceed our insurance coverage, could decrease our cash, and materially harm our business, financial condition, results of operations, stock price and prospects.

We are subject to the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and other anticorruption laws, as well as import and export control laws, customs laws, sanctions laws and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures, and legal expenses, which could adversely affect our business, financial condition, results of operations, stock price and prospects.

Our operations are subject to anticorruption laws, including the U.S. Foreign Corrupt Practices Act, or FCPA, the U.K. Bribery Act 2010, or the Bribery Act, and other anticorruption laws that apply in countries where we do business. We also may participate in collaborations and relationships with third parties whose actions, if noncompliant, could potentially subject us to liability under the FCPA, Bribery Act or local anticorruption laws. We are also subject to other laws and regulations governing our international operations, including regulations administered by the governments of the United States and the United Kingdom and authorities in the European Union, including applicable import and export control regulations, economic sanctions on countries and persons, anti-money laundering laws, customs requirements and currency exchange regulations, collectively referred to as the trade control laws.

We can provide no assurance that we will be completely effective in ensuring our compliance with all applicable anticorruption laws or other legal requirements, including trade control laws. If we are not in compliance with applicable anticorruption laws or trade control laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations, stock price and prospects. Likewise, any investigation of any potential violations of these anticorruption laws or trade control laws by U.S., U.K. or other authorities could also have an adverse impact on our reputation, our business, financial condition, results of operations, stock price and prospects.

If we fail to comply with federal and state healthcare laws, including fraud and abuse and health and other information privacy and security laws, we could face substantial penalties and our business, financial condition, results of operations, stock price and prospects will be materially harmed.

We are subject to many federal and state healthcare laws, such as the federal Anti-Kickback Statute, the federal civil and criminal False Claims Acts, the civil monetary penalties statute, the Medicaid Drug Rebate statute and other price reporting requirements, the Veterans Health Care Act of 1992, or VHCA, the federal Health Insurance Portability and Accountability Act of 1996 (as amended by the Health Information Technology for Economics and Clinical Health Act, or HITECH), or HIPAA, the FCPA, the ACA, and similar state laws. Even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third-party payors, certain federal and state healthcare laws, and regulations pertaining to fraud and abuse, reimbursement programs, government procurement, and patients' rights are and will be applicable to our business. We would be subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states and foreign jurisdictions in which we conduct our business. In the European Union, the data privacy laws are generally stricter than those that apply in the United States and include specific requirements for the collection of personal data of European Union persons or the transfer of personal data outside of the European Union to the United States to ensure that European Union standards of data privacy will be applied to such data.

If we or our operations are found to be in violation of any federal or state healthcare law, or any other laws or regulations that apply to us, we may be subject to penalties, including civil, criminal, and administrative penalties, damages, fines, disgorgement, suspension and debarment from government contracts, and refusal of orders under existing government contracts, exclusion from participation in U.S. federal or state health care programs, corporate integrity agreements, and the curtailment or restructuring of our operations, any of which could materially adversely affect our ability to operate our business and our financial results. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found not to be in compliance with applicable laws, it may be subject to criminal, civil or administrative sanctions, including but not limited to, exclusions from participation in government healthcare programs, which could also materially affect our business. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business.

We are subject to new legislation, regulatory proposals and healthcare payor initiatives that may increase our costs of compliance, and adversely affect our ability to market our products, obtain collaborators, and raise capital.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of our product candidates, restrict or regulate post approval activities and affect our ability to profitably sell any products for which we obtain marketing approval. We expect that current laws, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we may receive for any approved

products, which could have a material adverse effect on customers for our products, if approved, and, accordingly, on our results of operations.

Any reduction in reimbursement from Medicare or other government healthcare programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from commercializing our products and being able to generate revenue, and we could be prevented from or significantly delayed in achieving profitability.

Compliance with the federal track and trace requirements may increase our operational expenses and impose significant administrative burdens. As a result of these and other new proposals, we may determine to change our current manner of operation, provide additional benefits or change our contract arrangements, any of which could have a material adverse effect on our business, financial condition, results of operations, stock price and prospects.

Our employees, independent contractors, consultants, commercial partners, principal investigators, CMOs, or CROs may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have a material adverse effect on our business.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees, independent contractors, consultants, commercial partners, principal investigators, CMOs, or CROs could include intentional, reckless, negligent, or unintentional failures to comply with FDA regulations, comply with applicable fraud and abuse laws, provide accurate information to the FDA, properly calculate pricing information required by federal programs, report financial information or data accurately or disclose unauthorized activities to us. This misconduct could also involve the improper use or misrepresentation of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. Moreover, it is possible for a whistleblower to pursue a False Claims Act case against us even if the government considers the claim unmeritorious and declines to intervene, which could require us to incur costs defending against such a claim. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, financial condition, results of operations, stock price and prospects, including the imposition of significant fines or other sanctions.

Violations of or liabilities under environmental, health and safety laws and regulations could subject us to fines, penalties or other costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures, the handling, use, storage, treatment and disposal of hazardous materials and wastes and the cleanup of contaminated sites. Our operations involve the use of hazardous and flammable materials, including chemicals and biological and radioactive materials. Our operations also produce hazardous waste products. We would incur substantial costs as a result of violations of or liabilities under environmental requirements in connection with our operations or property, including fines, penalties and other sanctions, investigation and cleanup costs and third party claims. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

Although we maintain workers' compensation insurance to cover costs and expenses, we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological or hazardous materials.

Our internal computer systems, or those of our third-party CROs or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our development programs.

Our internal computer systems, and those of our CROs, CMOs, information technology suppliers and other contractors and consultants are vulnerable to damage from computer viruses, cyber-attacks and other unauthorized access, natural disasters, terrorism, war, and telecommunication and electrical failures. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs. For example, the loss of clinical trial data from completed, ongoing or planned clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of personal, confidential or proprietary information, we could incur liability and the further development of any of our product candidates could be delayed.

Risks related to our operations

Our financial condition and results of operations could be adversely affected by the coronavirus disease-2019, or COVID-19, outbreak.

In December 2019, a novel strain of coronavirus, now referred to as COVID-19, surfaced in Wuhan, China. The COVID-19 virus and its variants continue to spread globally, including in the United States, the United Kingdom and other countries in which we conduct clinical trials, and has been declared a pandemic by the World Health Organization. The impact of this pandemic has been and will likely continue to be extensive in many aspects of society, which has resulted in and will likely continue to result in significant disruptions to the global economy and supply chains, as well as businesses and capital markets around the world. In an effort to halt the outbreak of COVID-19, many countries, including the United States, the United Kingdom and certain other countries in which we conduct clinical trials, placed significant restrictions on travel and business operations or issued shelter-in-place orders. These restrictions and orders continue to remain in effect to varying degrees, the effect of which required, and in some instances, continue to require, certain of our employees and clinical trial staff to work remotely and avoid unnecessary travel. These restrictions and orders have impacted the pace of enrollment in our clinical trials, and if they continue, may affect our results and operations.

The COVID-19 pandemic is affecting the United States and global economies and has affected and may continue to affect our operations and those of third parties on which we rely, including by causing disruptions in our raw material and anti-PD-1 supply, the manufacturing of our product candidates, the access to laboratory and other supplies necessary for development and packaging of our product candidates, our commercialization processes and the conduct and the enrollment of current and future clinical trials. Many manufacturers have experienced shortages of key equipment and ingredients needed for product manufacturing. In addition, the COVID-19 pandemic has affected and may continue to affect the operations of the FDA and comparable foreign regulatory authorities, which could result in delays of reviews and approvals, including with respect to RP1 and our other product candidates. By example, we may be delayed in obtaining any necessary FDA inspections that are required for product approval following submission of a BLA. The evolving COVID-19 pandemic has also directly or indirectly impacted and is likely to continue to impact the pace of enrollment in our clinical trials as patients may avoid or may not be able to travel to healthcare facilities and physicians' offices unless due to a health emergency, and clinical trial staff may no longer be able to get to the clinic. Such facilities and offices have focused, and may continue to be required to focus, limited resources on non-clinical trial matters, including treatment of COVID-19 patients, and may not be available, in whole or in part, for clinical trial services. In addition, employee disruptions and remote working environments related to the COVID-19 pandemic and the federal, state and local responses to such virus, could materially impact the efficiency and pace with which we work and develop our product candidates.

The COVID-19 pandemic and the government and public health response continues to rapidly evolve and fluctuation in infection rates in the regions in which we operate has resulted in periodic changes in restrictions that vary from region to region and require vigilant attention and rapid response to new or reinstated orders. In light of the COVID-19 pandemic, the FDA has issued a number of new guidance documents. Specifically, as a result of the potential effect of the COVID-19 pandemic on many clinical trial programs in the United States and globally, the FDA issued guidance concerning potential impacts on clinical trial programs, changes that may be necessary to such programs if they proceed, considerations regarding trial suspensions and discontinuations, the potential need to consult with or make submissions to relevant ethics committees, IRBs, and the FDA, the use of alternative drug delivery methods, and considerations with respect to the outbreak's impacts on endpoints, data collection, study procedures, and analysis. Additionally, in March 2020, the U.S. Congress passed the Coronavirus Aid, Relief, and Economic Security Act, which includes a number of provisions that are applicable to the pharmaceutical industry, and further acts, laws or regulations may be enacted or implemented in the future.

While the potential economic impact brought by, and the duration and severity of, the COVID-19 pandemic are difficult to assess or predict, the impact of the COVID-19 pandemic on the global financial markets may reduce our ability to access capital, which could negatively impact our short-term and long-term liquidity. Additionally, the stock market has been unusually volatile during the COVID-19 pandemic and such volatility may continue. During certain periods of the COVID-19 pandemic, our stock price fluctuated significantly, and such fluctuation may continue to occur. The ultimate impact of the COVID-19 pandemic on our business will largely depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the emergence of new variants, the ultimate geographic spread of the disease, the duration of the pandemic, travel restrictions and social distancing in the United States and other countries, business closures or business disruptions, the ultimate impact on financial markets and the global economy, and the effectiveness of any COVID-19 vaccines and actions taken in the United States and other countries to contain and treat the disease. While vaccines for COVID-19 are being, and have been developed, new variants may continue to emerge and there is no guarantee that any such vaccine will be effective, work as expected, work against evolving COVID-19 strains or be made available or will be accepted on a significant scale and in a timely manner.

We do not yet know the full extent of the delays or impacts on our business, financing or clinical trial activities, healthcare systems or the global economy as a whole. However, these effects could have a material impact on our liquidity,

capital resources, operations and business and those of the third parties on which we rely. To the extent the COVID-19 pandemic materially impacts our business and financial results, it may also have the effect of significantly heightening many of the other risk described in this "Risk Factors" section.

We will need to expand the size of our organization, and we may experience difficulties in managing this growth, which could disrupt our operations.

As our development and commercialization plans and strategies develop, we expect to need additional managerial, operational, sales, marketing, financial and other personnel. Our future financial performance and our ability to commercialize RP1 and our other product candidates will depend, in part, on our ability to effectively manage any future growth, which would impose significant additional responsibilities on members of management and may divert their attention away from day-to-day activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services. The services include substantially all aspects of clinical trial management and manufacturing, as well as support for our financial reporting and accounting functions. If the services of independent organizations, advisors and consultants become unavailable to us or we are unable to effectively manage our outsourced activities, or if the quality or accuracy of such services is compromised for any reason, our clinical trials may be extended, delayed or terminated, we may not comply with our financial reporting and accounting obligations on a timely basis and we may not be able to obtain marketing approval of RP1 and our other product candidates or otherwise advance our business.

If we are not able to effectively expand our organization by hiring qualified new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize RP1 and our other product candidates and, accordingly, may not achieve our research, development and commercialization goals.

We are highly dependent on our key personnel, including Philip Astley-Sparke, our Chief Executive Officer; Robert Coffin, Ph.D., our President and Chief Research & Development Officer; and Colin Love, Ph.D., our Chief Operating Officer. If we are not successful in attracting, motivating 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, motivate and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on our management and particularly on the services of our founders, as well as our other scientific, manufacturing, quality and medical personnel, including Philip Astley-Sparke, our Chief Executive Officer, Robert Coffin, Ph.D., our President and Chief Research & Development Officer, and Colin Love, Ph.D., our Chief Operating Officer. The loss of the services of our key personnel and any of our other executive officers, key employees, and scientific and medical advisors, and our inability to find suitable replacements, could result in delays in product development and harm our business. Additionally, competition for skilled personnel is intense and the turnover rate can be high, which may limit our ability to hire and retain highly qualified personnel on acceptable terms or at all.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we have provided stock option and restricted stock unit grants that vest over time. The value to employees of these equity grants that vest over time may be 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. Although we have employment agreements with our key employees, these employment agreements generally provide for at-will employment, which means that any of our employees could leave our employment at any time, with or without notice.

If we fail to establish and maintain proper and effective internal control over financial reporting our ability to produce accurate and timely financial statements could be impaired.

We are required to maintain internal control over financial reporting. We must perform system and process design evaluation and testing of the effectiveness of our internal controls over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. We continue to be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to incur substantial professional fees and internal costs for our accounting and finance functions, expend significant management efforts, continue to implement plans developed to address

areas that we have identified as requiring improvement, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls over financial reporting, we may not be able to produce timely and accurate financial statements. If that were to happen, our investors could lose confidence in our reported financial information, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC, Nasdaq or other regulatory authorities.

We believe that any internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. We may discover weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our consolidated financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

Risks related to our common stock and general risk factors

An active trading market for our common stock may not be sustained.

Our common stock began trading on the Nasdaq Global Select Market on July 20, 2018. Given the limited trading history of our common stock, there is a risk that an active trading market for shares of our common stock may not be sustained. In the absence of an active trading market for shares of our common stock, our stockholders may not be able to sell their common stock at or above the price at which such stockholder acquired our common stock or at the time that they would like to sell.

The price of our common stock may be volatile and fluctuate substantially, which could result in substantial losses for purchasers of our common stock.

Our stock price has been and is likely to be volatile. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your common stock at or above the price at which it was acquired. The market price for our common stock may be influenced by many factors, including:

- the success of competitive products or technologies;
- results of clinical trials of RP1 and our other product candidates or those of our competitors;
- regulatory or legal developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to the development of RP1 and our other product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates or drugs;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;

- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions;
- political and economic instability, including the impact of COVID-19, the possibility of an economic recession, international hostilities including, but not limited to, the ongoing military conflict between Russia and Ukraine, acts of terrorism, governmental restrictions and sanctions, inflation, global supply chain disruptions, trade relationships and military and political alliances; and
- the other factors described in this "Risk Factors" section.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or our guidance.

Our quarterly and annual operating results may fluctuate significantly in the future, which makes it difficult for us to predict our future operating results. From time to time, we may enter into license or collaboration agreements with other companies that include development funding and significant upfront and milestone payments and/or royalties, which may become an important source of our revenue. Accordingly, our revenue may depend on development funding and the achievement of development and clinical milestones under current and any potential future license and collaboration agreements and sales of our products, if approved. These upfront and milestone payments may vary significantly from period to period and any such variance could cause a significant fluctuation in our operating results from one period to the next.

In addition, we measure compensation cost for stock-based awards made to employees at the grant date of the award, based on the fair value of the award as determined by our board of directors, and recognize the cost as an expense over the employee's requisite service period. As the variables that we use as a basis for valuing these awards change over time, including, our underlying stock price and stock price volatility, the magnitude of the expense that we must recognize may vary significantly.

Furthermore, our operating results may fluctuate due to a variety of other factors, many of which are outside of our control and may be difficult to predict, including the following:

- timing and cost of, and level of investment in, research and development activities relating to our current and any future product candidates, which will change from time to time;
- the total expenses we incur in connection with equipping and operating our manufacturing facility;
- our ability to engage clinical trial sites in the U.S. and in foreign territories, obtain the approval for conducing our clinical trials in foreign territories from their regulatory authorities, as well as our ability to enroll the number of patients necessary in our clinical trials and the timing of enrollment;
- the cost of manufacturing our current and any future product candidates, which may vary depending on the FDA's and comparable foreign regulatory authorities' guidelines and requirements, the quantity of production and the terms of any agreements with manufacturers;
- expenditures that we will or may incur to acquire or develop additional product candidates and technologies;
- the timing and outcomes of clinical and preclinical studies for RP1 and our other product candidates or competing product candidates;
- competition from existing and potential future products that compete with RP1 and our other product candidates, and changes in the competitive landscape of our industry, including consolidation among our competitors or partners;
- any delays in regulatory review or approval of RP1 or our other product candidates;

- the level of demand for RP1 and our other product candidates, if approved, which may fluctuate significantly and be difficult to predict;
- the risk/benefit profile, cost and reimbursement policies with respect to our product candidates, if approved, and existing and potential future products that compete with RP1 and our other product candidates;
- our ability to commercialize RP1 and our other product candidates, if approved, inside and outside of the United States, either independently or working with third parties;
- the success of and our ability to establish and maintain collaborations, licensing or other arrangements;
- our ability to adequately support future growth;
- potential unforeseen business disruptions that increase our costs or expenses;
- political and economic instability, including the impact of COVID-19, the possibility of an economic recession, international hostilities, including, but not limited to, those resulting from the ongoing military conflict between Russia and Ukraine, acts of terrorism, governmental restrictions and sanctions, inflation, global supply chain disruptions, trade relationships and military and political alliances;
- future accounting pronouncements or changes in our accounting policies; and
- the changing and volatile global economic environment.

These factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue and/or earnings guidance we may provide.

We have broad discretion in how we use our cash, cash equivalents and investments, and may not use these resources effectively, which could affect our results of operations and cause our stock price to decline.

Our management has considerable discretion in the application of our cash, cash equivalents and investments. We intend to use our resources to fund our preclinical and clinical development programs as well as for general corporate purposes, including working capital requirements and other operating expenses. As a result, investors will be relying upon management's judgment with only limited information about our specific intentions for the use of our resources. We may use our resources for purposes that do not yield a significant return or any return at all for our stockholders. In addition, pending their use, we may invest our cash, cash equivalents and investments in a manner that does not produce income or that loses value.

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 future 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, which may never occur, as the only way to realize any return on their investment.

Our executive officers, directors, and stockholders and their affiliates who beneficially own more than 5% of our common stock exercise significant influence over our company, which limits your ability to influence corporate matters and could delay or prevent a change in corporate control.

Based on the number of shares outstanding as of September 30, 2022, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates beneficially owned a significant portion of our voting stock and, accordingly, these stockholders will continue to have significant influence over matters requiring stockholder approval. For example, these stockholders will continue to significantly influence elections of directors, amendments of our organizational

documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may feel are in your best interest as one of our stockholders.

Conflicts of interest may arise because some members of our board of directors are representatives of our principal stockholders.

Certain of our principal stockholders or their affiliates are venture capital funds or other investment vehicles that could invest in entities that directly or indirectly compete with us. As a result of these relationships, when conflicts arise between the interests of the principal stockholders or their affiliates and the interests of other stockholders, members of our board of directors that are representatives of the principal stockholders may not be disinterested. Neither the principal stockholders nor the representatives of the principal stockholders on our board of directors, by the terms of our amended and restated certificate of incorporation, are required to offer us any transaction opportunity of which they become aware and could take any such opportunity for themselves or offer it to their other affiliates, unless such opportunity is expressly offered to them solely in their capacity as members of our board of directors.

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

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the expiration of contractual or legal restrictions on resale lapse, the market price of our common stock could decline. These sales may make it more difficult for us to sell equity or equity related securities in the future at a time and price that we deem appropriate, or to use equity as consideration for future acquisition.

In addition, a significant number of shares of common stock that are either subject to outstanding options and restricted stock units, reserved for future issuance under our equity incentive plans or subject to outstanding warrants are eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules and Rule 144 and Rule 701 under the Securities Act, including our ESPP if activated. If these additional shares of common stock are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

Certain holders of shares of our common stock, or their permitted transferees, are entitled to rights with respect to the registration under the Securities Act of shares of our common stock pursuant to the amended and restated investors' rights agreement by and among us and certain of our stockholders. Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares purchased by affiliates. Any sales of securities by these stockholders could have a material adverse effect on the market price of our common stock.

We may sell up to $100 million of shares of our common stock in “at-the-market” offerings pursuant to the 2022 Sales Agreement. The sale of a substantial number of shares of our common stock pursuant to the 2022 Sales Agreement, or anticipation of such sales, could cause the trading price of our common stock to decline or make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise desire. In addition, issuances of any shares of our common stock sold pursuant to the 2022 Sales Agreement will have a dilutive effect on our existing stockholders.

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

To the extent that we raise additional capital through the sale of common stock or securities convertible, exercisable or exchangeable into common stock, our existing stockholders’ interest will be diluted. Debt financing, if available, would increase our fixed payment obligations and may involve agreements that include 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 additional funds through equity or debt financings when needed, we may be required to grant rights to develop and market one or more of our product candidates or technologies that we would otherwise prefer to develop and market ourselves.

If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.

We may evaluate various acquisitions and strategic partnerships, including licensing or acquiring complementary products, intellectual property rights, technologies, or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- the issuance of our equity securities;
- assimilation of operations, intellectual property and products of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing product programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel, and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party, their regulatory compliance status, and their existing products or product candidates and marketing approvals; and
- our inability to generate revenue from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

In addition, if we undertake acquisitions, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense or intangible asset impairment charges. Moreover, we may not be able to locate suitable acquisition opportunities and this inability could impair our ability to grow or obtain access to technology or products that may be important to the development of our business. Any of the foregoing may materially harm our business, financial condition, results of operations, stock price and prospects.

Unfavorable market and economic conditions may have serious adverse consequences on our business, financial condition, results of operations, stock price and prospects.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. The most recent global financial crisis caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including a reduced ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the economic climate and financial market conditions could adversely impact our business.

Global financial markets have been experiencing extreme disruption in recent months, including, among other things, extreme volatility in securities prices. We are unable to predict the likely duration and severity of the current disruptions in financial markets and adverse economic conditions throughout the world. These economic developments affect businesses such as ours and those of third parties on which we rely in a number of ways that could result in unfavorable consequences to us. Current economic conditions or a deepening economic downturn in the United States and elsewhere have reduced and may continue to reduce our ability or willingness to access capital, which could negatively impact our short-term and long-term liquidity.

Although we are not aware of any downgrades, material losses, or other significant deterioration in the fair value of our cash equivalents or short-term investments, we cannot assure you that deterioration of the global credit and financial markets would not negatively impact our current portfolio of cash equivalents or short-term investments, or our ability to meet our financing objectives. Furthermore, our stock price may decline due, in part, to the volatility of the stock market and general economic downturns.

Exchange rate fluctuations may materially affect our results of operations and financial conditions.

Owing to the international scope of our operations, fluctuations in exchange rates, particularly between the U.S. dollar and the British pound and the euro, may adversely affect us. Although we are based in the United States, we have significant

research and development operations in the United Kingdom, and source third-party manufacturing, consulting and other services in the United Kingdom and the European Union. As a result, our business and the price of our common stock may be affected by fluctuations in foreign exchange rates, which may have a significant impact on our results of operations and cash flows from period to period. Currently, we do not have any exchange rate hedging arrangements in place.

Unfavorable global economic conditions and geopolitical events could adversely affect our business, financial condition or results of operations.

Our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets. The financial markets and the global economy may also be adversely affected by the current or anticipated impact of military conflict, including the ongoing conflict between Russia and Ukraine, terrorism or other geopolitical events. Sanctions imposed by the United States and other countries in response to such conflicts may also adversely impact our clinical trials, the financial markets and the global economy, and any economic countermeasures by the affected countries or others could exacerbate market and economic instability. A weak or declining economy or political disruption, including any international trade disputes, could disrupt or otherwise adversely impact our operations and those of third parties upon which we rely. Although we do not currently operate in Russia or Ukraine, if the conflict broadens it may impact countries or territories in which we do operate or intend to operate, which could have a negative impact on our ability to achieve our objectives or timelines.

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

None.

Item 3. Defaults Upon Senior Securities.

Not applicable.

Item 4. Mine Safety Disclosure.

Not applicable.

Item 5. Other Information.

None.

Item 6. Exhibits.

Exhibit Number	Exhibit Description	Incorporated by Reference		
		Form	Date	Number
10.1*‡	Loan and Security Agreement by and among Replimune Group, Inc., Replimune, Inc., Replimune Limited and Hercules Capital, Inc., dated October 6, 2022.			
31.1*	Certification of the Chief Executive Officer, as required by Section 302 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350).			
31.2*	Certification of the Chief Financial Officer, as required by Section 302 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350).			
32.1*	Certification of the Chief Executive Officer, as required by Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350).			
32.2*	Certification of the Chief Financial Officer, as required by Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350).			
101.INS*	XBRL Instance Document.			
101.SCH*	XBRL Taxonomy Extension Schema Document.			
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document.			
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document.			
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document.			
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document.			
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).			

* Filed or furnished herewith. The certifications furnished in Exhibit 32.1 and Exhibit 32.2 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

† Indicates management contract or compensatory plan.

*‡ Pursuant to Item 601(b)(10)(iv) of Regulation S-K promulgated by the SEC, certain portions of this exhibit have been omitted. The Company hereby agrees to furnish supplementally to the SEC, upon its request, an unredacted copy of this exhibit.

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.

REPLIMUNE GROUP, INC.

Dated: November 3, 2022

By: /s/ Philip Astley-Sparke
Name: Philip Astley-Sparke
Title: Chief Executive Officer and Director
(Principal Executive Officer)

Dated: November 3, 2022

By: /s/ Jean Franchi
Name: Jean Franchi
Title: Chief Financial Officer
(Principal Financial Officer)

Certain identified information has been excluded from this exhibit because it is both (i) not material and (ii) is the type of information that the registrant treats as private or confidential. Triple asterisks denote omissions

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT is made and dated as of October 6, 2022 and is entered into by and among Replimune Group, Inc., a Delaware corporation, and each of its Subsidiaries (other than Excluded Subsidiaries and the MSC Subsidiary) (hereinafter individually and collectively referred to as "Borrower"), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, referred to as the "Lenders") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lenders (in such capacity, the "Agent").

RECITALS

A. Borrower has requested the Lenders make available to Borrower term loans in an aggregate principal amount of up to Two Hundred Million Dollars ($200,000,000) (collectively, the "Term Loan"); and

B. The Lenders are willing to make the Term Loan on the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, Borrower, Agent and the Lenders agree as follows:

SECTION 1 DEFINITIONS AND RULES OF CONSTRUCTION

1.1 Unless otherwise defined herein, the following capitalized terms shall have the following meanings:

"Account Control Agreement(s)" means any agreement entered into by and among the Agent, Borrower and a third party bank or other institution (including a Securities Intermediary) in which Borrower maintains a Deposit Account or an account holding Investment Property and which perfects Agent's first priority security interest in the subject account or accounts, or in the case of a jurisdiction outside of the United States, any agreements in favor of the Agent pledging the accounts of the applicable Borrower as security, in form and substance reasonably satisfactory to the Agent.

"ACH Authorization" means the ACH Debit Authorization Agreement in substantially the form of Exhibit G, which account numbers shall be redacted for security purposes if and when filed publicly by the relevant Borrower.

"Acquisition" means any transaction or series of related transactions for the purpose of or resulting, directly or indirectly, in (a) the acquisition of all or substantially all of the assets of a Person, or of any business, line of business or division or other unit of operation of a Person, (b) the acquisition of the Equity Interests of any Person, whether or not involving a merger, consolidation or similar transaction with such other Person, or otherwise causing any Person to become a Subsidiary of Borrower, or (c) the acquisition of, or the right to use, develop

or sell (in each case, including through licensing), any product, product line or Intellectual Property of or from any other Person.

"Advance(s)" means a Term Loan Advance.

"Advance Date" means the funding date of any Advance.

"Advance Request" means a request for an Advance submitted by Borrower to Agent in substantially the form of Exhibit A, which account numbers shall be redacted for security purposes if and when filed publicly by Borrower.

"Affiliate" means (a) any Person that directly or indirectly controls, is controlled by, or is under common control with the Person in question, (b) any Person directly or indirectly owning, controlling or holding with power to vote ten percent (10%) or more of the outstanding voting securities of another Person, (c) any Person ten percent (10%) or more of whose outstanding voting securities are directly or indirectly owned, controlled or held by another Person with power to vote such securities, or (d) any Person related by blood or marriage to any Person described in subsection (a), (b) or (c) of this paragraph. As used in the definition of "Affiliate," the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities, by contract or otherwise.

"Agreement" means this Loan and Security Agreement, as amended from time to time.

"Amortization Date" means initially, October 1, 2026; provided however, that (a) if the Approval Milestone is achieved prior to October 1, 2026, such date shall be extended to April 1, 2027 and (b) if (i) if the conditions to the extension set forth in clause (a) have been satisfied and (ii) the Revenue Milestone is achieved, such date shall be extended to October 1, 2027.

"Anti-Corruption Laws" shall mean all laws, rules, and regulations of any jurisdiction applicable to Borrower or any of its Affiliates from time to time concerning or relating to bribery or corruption, including without limitation the United States Foreign Corrupt Practices Act of 1977, as amended, the UK Bribery Act 2010 and other similar legislation in any other jurisdictions.

"Anti-Terrorism Laws" means any laws, rules, regulations or orders relating to terrorism or money laundering, including without limitation Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"Approval Milestone" means the satisfaction of each of the following events: (a) no Default or Event of Default shall have occurred and be continuing and (b) Parent shall have stated in Parent's public filings with the Securities and Exchange Commission (as confirmed by Agent in its reasonable discretion) that the FDA has approved the commercialization in the United States of RP1 for either indications related to: (i) the treatment of patients with CSCC or (ii) the treatment of patients with Melanoma who failed anti-PD1 therapy, in each case with a

label claim that is generally consistent in all material respects with that sought in Borrower's BLA filing.

"Article 55 BRRD" means Article 55 of Directive 2014/59/EU (as amended or reenacted from time to time) establishing a framework for the recovery and resolution of credit institutions and investment firms.

"Bail-In Action" means the exercise of any Write-down and Conversion Powers.

"Bail-In Legislation" means: (a) in relation to an EEA Member Country which has implemented, or which at any time implements, Article 55 BRRD, the relevant implementing law or regulation as described in the EU Bail-In Legislation Schedule from time to time; and (b) in relation to any state other than such an EEA Member Country or (to the extent that the United Kingdom is not such an EEA Member Country) the United Kingdom, any analogous law or regulation from time to time which requires contractual recognition of any Write-down and Conversion Powers contained in that law or regulation.

"BLA" has the meaning set forth in the definition of BLA Filing.

"BLA Filing" means a Biologics License Application ("BLA") with respect to RP1 that was submitted by Borrower to the FDA.

"Blocked Person" means any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with which any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

"Board of Directors" means the board of directors or comparable governing body of such Person, or any subcommittee thereof, as applicable.

"Borrower Products" means all products, software, service offerings, technical data or technology currently being designed, manufactured or sold by Borrower or which Borrower intends to sell, license, or distribute in the future including any products or service offerings under development, collectively, together with all products, software, service offerings, technical data or technology that have been sold, licensed or distributed by Borrower since its incorporation and remain material to its business.

"Borrower's Books" means Borrower's or any of its Subsidiaries' books and records including ledgers, federal, state, local and foreign tax returns, records regarding Borrower's or its Subsidiaries' assets or liabilities, the Collateral, business operations or financial condition, and all computer programs or storage or any equipment containing such information.

"Business Day" means any day other than Saturday, Sunday and any other day on which banking institutions in the State of California are closed for business.

"Cash" means all cash, cash equivalents and liquid funds.

"Change in Control" means (a) any reorganization, recapitalization, consolidation or merger (or similar transaction or series of related transactions) of Parent, sale or exchange of outstanding shares (or similar transaction or series of related transactions) of Parent in which the holders of Parent's outstanding shares immediately before consummation of such transaction or series of related transactions do not, immediately after consummation of such transaction or series of related transactions, retain shares representing more than fifty percent (50%) of the voting power of the surviving entity of such transaction or series of related transactions (or the parent of such surviving entity if such surviving entity is wholly owned by such parent), in each case without regard to whether Parent is the surviving entity or (b) Borrower ceases to own, directly or indirectly, 100% of the ownership interests in each Subsidiary of such Borrower (except for mergers or consolidations of a Subsidiary into another Subsidiary or into Borrower, or the dissolution of a Subsidiary to the extent permitted hereunder).

"Clinical Milestone" means the satisfaction of each of the following events: (a) no Default or Event of Default shall have occurred and be continuing and (b) Parent shall have stated in Parent's public filings with the Securities and Exchange Commission and delivered supporting documentation satisfactory to Agent (as determined by Agent in its reasonable discretion) that it has achieved a protocol specified primary endpoint from the study entitled, Study Evaluating Cemiplimab Alone and Combined With RP1 in Treating Advanced Squamous Skin Cancer (CERPASS) (NCT04050436) which, taken together with other secondary endpoints, support the submission of a BLA Filing as the next immediate step in development (as determined by Borrower's executive team and Board of Directors and subject to Lender's reasonable verification).

"Closing Date" means the date of this Agreement.

"Code" means the Internal Revenue Code of 1986, as amended.

"Common Stock" means the common stock of Parent.

"Company IP" means any and all of the following, as they exist in and throughout the United States of America: (a) Current Company IP; (b) improvements, continuations, continuations-in-part, divisions, provisionals or any substitute applications, any Patent issued with respect to any of the Current Company IP, any Patent right claiming the composition of matter of, or the method of making or using, the Products in the United States of America, any reissue, reexamination, renewal or Patent term extension or adjustment (including any supplementary protection certificate) of any such Patent, and any confirmation Patent or registration Patent or patent of addition based on any such Patent; (c) trade secrets or trade secret rights, including any rights to unpatented inventions, know-how, show-how, operating manuals, confidential or proprietary information, research in progress, algorithms, data, databases, data collections, designs, processes, procedures, methods, protocols, materials, formulae, drawings, schematics, blueprints, flow charts, models, strategies, prototypes, techniques, and the results of experimentation and testing, including samples, in each case, as specifically related to any research, development, manufacture, production, use, commercialization, marketing, importing,

storage, transport, offer for sale, distribution or sale of the Products; and (d) any and all IP Ancillary Rights specifically relating to any of the foregoing.

"Contingent Obligation" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any Indebtedness, lease, dividend, letter of credit or other obligation of another, including any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

"Copyright License" means any written agreement granting any right to use any Copyright or Copyright registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

"Copyrights" means all copyrights, whether registered or unregistered, held pursuant to the laws of the United States of America, any State thereof, the United Kingdom, or of any other country.

"CSCC" means Cutaneous Squamous Cell Carcinoma.

"Default" means a fact, event or condition that constitutes an Event of Default or that, with the giving of notice or the lapse of time, or both, would, unless cured or waived, constitute an Event of Default.

"Deposit Accounts" means any "deposit accounts," as such term is defined in the UCC, and includes any checking account, savings account, or certificate of deposit.

"Domestic Subsidiary" means any Subsidiary organized under the laws of the United States of America, any State thereof, the District of Columbia, or any other jurisdiction within the United States of America.

"Due Diligence Fee" means $65,000, which fee has been paid to the Lenders prior to the Closing Date and shall be deemed fully earned on such date regardless of the early termination of this Agreement and shall be applied in its entirety on the Closing Date towards the Lenders' non-legal transaction costs and due diligence expenses.

"EEA Member Country" means any member state of the European Union, Iceland, Liechtenstein and Norway.

"English Debenture" means that certain English law governed debenture, dated as of the date hereof, executed by Replimune UK and the Agent.

"English Security Documents" means the following documents, each in form and substance reasonably satisfactory to Agent: (a)the English Debenture , (b) that certain English law governed share charge in respect of the entire issued share capital of Replimune UK, dated as of the date hereof, executed by the Parent and the Agent, and (c) such other documents incidental to the foregoing documents as Agent may reasonably determine necessary.

"EU Bail-In Legislation Schedule" means the document described as such and published by the Loan Market Association (or any successor person) from time to time.

"End of Term Charge" means any end of term charge payable pursuant to Section 2.6.

"Equity Interests" means, with respect to any Person, the capital stock, partnership or limited liability company interest, or other equity securities or equity ownership interests of such Person.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated thereunder.

"Excluded Account" means (a) any deposit account or securities account exclusively used as a trust, collateral, or escrow account, in each case (1) entered into in the ordinary course of business, (2) where the applicable Borrower holds the funds exclusively for the benefit of an unaffiliated third party, (3) such funds are pledged or otherwise encumbered as set forth on Schedule 1C or pursuant to clauses (vi), (xiv), or (xv) of the definition of Permitted Liens, and (4) only to the extent required to be excluded pursuant to the underlying documents entered into in connection with such Permitted Liens, (b) any deposit account or securities account exclusively used to secure obligations permitted under clause (vii) of the definition of Permitted Indebtedness, and (c) any deposit account exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for any Borrower's employees, collectively not to exceed the amount to be paid in the ordinary course of business in the then-next payroll cycle.

"Excluded Subsidiaries" means all Foreign Subsidiaries (other than Replimune UK) that (a) generate in the aggregate less than 5.00% of the consolidated trailing twelve month revenue calculated in accordance with GAAP of the Parent and its Subsidiaries as of the last day of the most recent fiscal month for which financial statements of the Parent are available or (b) hold in the aggregate assets that constitute less than 5.00% of consolidated total assets of the Parent and its Subsidiaries, at any time; provided that, if the consolidated trailing twelve month revenue calculated in accordance with GAAP or consolidated total assets of all Foreign Subsidiaries that would otherwise be an "Excluded Subsidiary" pursuant to clauses (a) and (b) above exceeds (i) 5.00% of the of the consolidated trailing twelve month revenue calculated in accordance with GAAP of the Parent and its Subsidiaries for such fiscal month or (ii) 5.00% of

consolidated total assets of the Parent and its Subsidiaries, at any time, then Borrower shall designate in writing to the Agent one or more of such Foreign Subsidiaries to become a Borrower to the extent necessary to eliminate such excess.

"FDA" means the U.S. Food and Drug Administration or any successor thereto or any other comparable Governmental Authority.

"FDA Laws" means all applicable statutes, rules, regulations, published guidance and Requirements of Law administered, implemented, enforced or issued by FDA or any comparable governmental authority.

"Federal Health Care Program Laws" means collectively, federal Medicare or federal or state Medicaid statutes, Sections 1128, 1128A, 1128B, 1128C or 1877 of the Social Security Act (42 U.S.C. §§ 1320a-7, 1320a-7a, 1320a-7b, 1320a-7c, 1320a-7h and 1395nn), the federal TRICARE statute (10 U.S.C. § 1071 et seq.), the civil False Claims Act of 1863 (31 U.S.C. § 3729 et seq.), criminal false claims statutes (e.g., 18 U.S.C. §§ 287 and 1001), the Program Fraud Civil Remedies Act of 1986 (31 U.S.C. § 3801 et seq.), and the Health Insurance Portability and Accountability Act of 1996 (42 U.S.C. §§ 1320d-1329d-8), as amended by the Health Information Technology for Economic and Clinical Health Act, enacted as Title XIII of the American Recovery and Reinvestment Act of 2009, Public Law 111-5 (collectively, "HIPAA") or related regulations or other Requirements of Law applicable to Borrower that directly or indirectly govern the health care industry, programs of governmental authorities related to healthcare, health care professionals or other health care participants, or relationships among health care providers, suppliers, distributors, manufacturers and patients.

"Forecast" means the projections for Borrower as delivered to Agent by Borrower within 30 days after the achievement of the Approval Milestone, subject to approval by the Agent in its reasonable discretion; provided that (i) if Borrower does not submit such projections within such 30 day period after the achievement of the Approval Milestone then the Forecast shall be the projections delivered to Agent as of the Closing Date, (ii) if the Agent does not reject the projections delivered within such 30 day period after the achievement of the Approval Milestone in writing within 30 days after Borrower has received written confirmation from Agent that it has received such projections (with an explanation as to the reason(s) for such rejection) then such projections shall be deemed to be approved and shall be the Forecast, and (iii) Borrower may from time to time update the Forecast with a forecast approved by Borrower's Board of Directors delivered to Agent pursuant to Section 7.1(h), subject to approval by the Agent in its reasonable discretion.

"Foreign Subsidiary" means any Subsidiary other than a Domestic Subsidiary.

"GAAP" means generally accepted accounting principles in the United States of America, as in effect from time to time.

"HMRC" means HM Revenue & Customs of the UK.

"Indebtedness" means indebtedness of any kind, including (a) all indebtedness for borrowed money or the deferred purchase price of property or services (excluding trade credit entered into in the ordinary course of business due within ninety (90) days), including non-

contingent reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, (d) equity securities of any Person subject to repurchase or redemption other than at the sole option of such Person, (e) "earnouts", purchase price adjustments, profit sharing arrangements, deferred purchase money amounts and similar payment obligations or continuing obligations of any nature arising out of purchase and sale contracts, (f) obligations arising under bonus, deferred compensation, incentive compensation or similar arrangements (other than those arising in the ordinary course of business), (g) non-contingent obligations to reimburse any bank or Person in respect of amounts paid under a letter of credit, banker's acceptance or similar instrument, and (h) all Contingent Obligations.

"Initial Facility Charge" means an amount equal to Four Hundred and Eighty-Seven Thousand and Five Hundred Dollars ($487,500), which is payable to the Lenders in accordance with Section 4.1(h).

"Insolvency Proceeding" is any proceeding by or against any Person under the United States Bankruptcy Code, or any other bankruptcy, liquidation, moratorium, receivership, or insolvency law, including assignments for the benefit of creditors, compositions, extensions generally with its creditors, or proceedings seeking reorganization, administration, arrangement, or other similar relief proceedings in the applicable jurisdiction from time to time in effect and affecting the rights of creditors generally.

"Intellectual Property" means all of Borrower's Copyrights; Trademarks; Patents; Licenses; trade secrets and inventions; mask works; Borrower's applications therefor and reissues, extensions, or renewals thereof; and Borrower's goodwill associated with any of the foregoing, together with Borrower's rights to sue for past, present and future infringement of Intellectual Property and the goodwill associated therewith.

"Investment" means (a) any beneficial ownership (including stock, partnership, limited liability company interests, or other equity securities or ownership interests) of or in any Person, (b) any loan, advance or capital contribution to any Person, (c) any Acquisition or (d) other transfers on behalf of or in connection with any equity ownership or similar transfers.

"IP Ancillary Rights" means, with respect to any Copyright, Trademark, Patent, software, trade secrets or trade secret rights, including any rights to unpatented inventions, know-how, show-how and operating manuals, all income, royalties, proceeds and liabilities at any time due or payable or asserted under or with respect to any of the foregoing or otherwise with respect thereto, including all rights to sue or recover at law or in equity for any past, present or future infringement, misappropriation, dilution, violation or other impairment thereof, and, in each case, all rights to obtain any other intellectual property right ancillary to any Copyright, Trademark, Patent, software, trade secrets or trade secret rights.

"IRS" means the United States Internal Revenue Service.

"Joinder Agreements" means for each Subsidiary (other than Excluded Subsidiaries and the MSC Subsidiary), a completed and executed (i) Joinder Agreement in substantially the form attached hereto as Exhibit F, or (ii) joinder documentation in form and

substance reasonably satisfactory to the Agent joining a Subsidiary as a party under the English Security Documents or similar security documents under the relevant jurisdiction, as applicable.

"License" means any Copyright License, Patent License, Trademark License or other license of rights or interests in respect of Company IP.

"Lien" means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind and any other security interest or other agreements or arrangements having a similar effect, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, and any lease in the nature of a security interest.

"Loan" means the Advances made under this Agreement.

"Loan Documents" means this Agreement, the promissory notes (if any), the ACH Authorization, the Account Control Agreements, the Joinder Agreements, all UCC Financing Statements, the Pledge Agreement, the English Security Documents, each Process Letter, and any other documents executed in connection with the Secured Obligations or the transactions contemplated hereby, as the same may from time to time be amended, modified, supplemented or restated.

"Market Capitalization" means, as of any date of determination, the product of (a) the number of outstanding shares of Common Stock publicly disclosed in the most recent filing of Parent with the Securities and Exchange Commission as outstanding as of such date of determination and (b) the most recent closing price of Parent's Common Stock (as quoted on Bloomberg L.P.'s page or any successor page thereto of Bloomberg L.P. or if such page is not available, any other commercially available source).

"Material Adverse Effect" means a material adverse effect upon: (i) the business, operations, properties, assets or financial condition of Parent and its Subsidiaries taken as a whole; or (ii) the ability of Borrower to perform or pay the Secured Obligations in accordance with the terms of the Loan Documents, or the ability of Agent or the Lenders to enforce any of its rights or remedies with respect to the Secured Obligations; or (iii) the Collateral or Agent's Liens on the Collateral or the priority of such Liens.

"Material Regulatory Liabilities" means (i) any liabilities arising from the violation of Public Health Laws, Federal Health Care Program Laws, and other applicable comparable Requirements of Law (including FDA Laws and Federal Health Care Program Laws), including, but not limited to, withdrawal of approval, recall, revocation, suspension, import refusal and seizure of any Product, and (ii) any loss of recurring annual revenues as a result of any loss, suspension or limitation of any Registrations, which, in the case of each of clauses (i) and (ii), could reasonably be expected to result in a Material Adverse Effect.

"Maximum Term Loan Amount" means Two Hundred Million and No/100 Dollars ($200,000,000).

"Milestone" means individually, each of the Approval Milestone, Clinical Milestone, Revenue Milestone and/or Tranche 3 Milestone.

"MSC Investment Conditions" means that Borrower maintains Qualified Cash in an amount equal to or greater than the lesser of (i) 100% of the aggregate outstanding Secured Obligations (inclusive of any Prepayment Charge and End of Term Charge that would be due and owing if the outstanding Term Loan Advances were prepaid at the time of measurement) or (ii) 100% of the consolidated Cash of Borrower and its Subsidiaries (other than Cash held in an Excluded Account).

"MSC Subsidiary" means Replimune Securities Corporation, a wholly-owned Subsidiary incorporated in the Commonwealth of Massachusetts or the State of Delaware for the purpose of holding Investments as a Massachusetts security corporation under 830 CMR 63.38B.1 of the Massachusetts tax code and applicable regulations (as the same may be amended, modified or replaced from time to time).

"Net Product Revenue" means net product revenue of the Borrower and its Subsidiaries, as determined in accordance with GAAP, that is generated solely from the sale of RP1 (which, for the avoidance of doubt, shall include sales, royalty, profit sharing, co-development, co-promotion and co-commercialization revenues recognized in accordance with GAAP, but which shall not include any revenue that is milestone-based or any other one-time or non-recurring revenue).

"NIH" means the National Institutes of Health.

"Non-Disclosure Agreement" means that certain Non-Disclosure Agreement by and between Parent and Hercules Capital, Inc., dated as of July 25, 2022.

"OFAC" is the U.S. Department of Treasury Office of Foreign Assets Control.

"OFAC Lists" are, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"Parent" means Replimune Group, Inc., a Delaware corporation.

"Patent License" means any written agreement granting any right with respect to any invention on which a Patent is in existence or a Patent application is pending, in which agreement Borrower now holds or hereafter acquires any interest.

"Patents" means all letters patent of, or rights corresponding thereto, in the United States of America or in any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto, in the United States of America, the United Kingdom, or any other country.

"Performance Covenant Trigger Date" means the first date on or after July 1, 2024 on which the aggregate outstanding principal amount of the Term Loan Advances equals or exceeds $100,000,000.

"Permitted Acquisition" means any Acquisition (including by way of merger) by Borrower which is conducted in accordance with the following requirements:

(a) such acquisition is of (i) a business or Person located within the United States of America engaged in a line of business related to that of Borrower or its Subsidiaries or (ii) a product, product line or Intellectual Property (or the right to use, develop or sell the same (including through licensing) related to the business of Borrower or its Subsidiaries;

(b) if such acquisition is structured as a stock acquisition, then the Person so acquired shall either (i) become a wholly-owned Subsidiary of Borrower or of a Subsidiary and Borrower shall comply, or cause such Subsidiary to comply, with Section 7.13 hereof or (ii) such Person shall be merged with and into Borrower (with Borrower being the surviving entity);

(c) if such acquisition is structured as the acquisition of assets, such assets shall be acquired by Borrower or a newly-organized wholly-owned Subsidiary (in which event such Subsidiary shall comply with Section 7.13 hereof), and shall be free and clear of Liens other than Permitted Liens;

(d) Borrower shall have delivered to the Lenders not less than ten (10) days nor more than forty five (45) days prior to the date of such acquisition, notice of such acquisition together with, to the extent available, pro forma projected financial information, copies of all material documents relating to such acquisition, and historical financial statements for such acquired entity, division or line of business;

(e) both immediately before and after such acquisition no Default or Event of Default shall have occurred and be continuing; and

(f) the sum of the purchase price of such proposed new acquisition, computed on the basis of total acquisition consideration paid or incurred, or to be paid or incurred, by Borrower with respect thereto, including the amount of Permitted Indebtedness assumed or to which such assets, businesses or business or ownership interest or shares, or any Person so acquired, is subject, (i) at any time prior to the achievement of the Approval Milestone, shall not be greater than (x) Seven Million Five Hundred Thousand Dollars ($7,500,000) for any single acquisition or group of related acquisitions or (y) Ten Million Dollars ($10,000,000) for all such acquisitions during the term of this Agreement or (ii) at any time after the achievement of the Approval Milestone, shall not be greater than (x) Ten Million Dollars ($10,000,000) for any single acquisition or group of related acquisitions or (y) Twenty-Five Million Dollars ($25,000,000) for all such acquisitions during the term of this Agreement; provided that acquisition consideration funded by proceeds from the sale and issuance of Borrower's Equity Interests in a transaction not resulting in a Change in Control, which sale and issuance has a primary purpose to fund such Acquisition, and which sale and issuance is consummated substantially contemporaneously with (and in any event, prior to, but no more than fifteen (15) days prior to) the consummation of such Acquisition, shall be disregarded in determining compliance with this clause (f); provided further, that for any

Acquisition in which the consideration consists solely of Equity Interests of Borrower, the value of such Equity Interests shall be disregarded in determining compliance with this clause (f).

"Permitted Convertible Debt" means issuance by Parent of convertible notes in an aggregate principal amount of not more than Four Hundred Million Dollars ($400,000,000); provided that such convertible notes shall (a) have a scheduled maturity date no earlier than one hundred eighty (180) days after the Term Loan Maturity Date, (b) be unsecured or secured, (c) not be guaranteed by any Subsidiary of Parent that is not a Borrower or a guarantor of the Secured Obligations, (d) contain conversion, redemption and fundamental change terms that are usual and customary for convertible notes issued in public or "Rule 144A" offerings, (e) if secured, contain usual and customary subordination terms for underwritten offerings of senior subordinated convertible notes and (f) if secured, shall specifically designate this Agreement and all Secured Obligations as "designated senior indebtedness" or similar term so that the subordination terms referred to in clause (e) of this definition specifically refer to such notes as being subordinated to the Secured Obligations pursuant to such subordination terms.

"Permitted Indebtedness" means:

(i) Indebtedness of Borrower in favor of the Lenders or Agent arising under this Agreement or any other Loan Document;

(ii) Indebtedness existing on the Closing Date which is disclosed in Schedule 1A;

(iii) Indebtedness of up to $10,000,000 outstanding at any time secured by a Lien described in clause (vii) of the defined term "Permitted Liens," provided such Indebtedness does not exceed the cost of the Equipment financed with such Indebtedness;

(iv) Indebtedness to trade creditors incurred in the ordinary course of business, including Indebtedness incurred in the ordinary course of business with corporate credit cards;

(v) Indebtedness that also constitutes a Permitted Investment;

(vi) Subordinated Indebtedness;

(vii) reimbursement obligations in connection with letters of credit that are secured by Cash and issued on behalf of Borrower or a Subsidiary thereof in an amount not to exceed (A) at any time prior to the achievement of the Approval Milestone, $3,500,000 at any time outstanding or (B) at any time following the achievement of the Approval Milestone, $5,000,000 at any time outstanding,

(viii) other unsecured Indebtedness in an amount not to exceed $2,000,000 at any time outstanding,

(ix) intercompany Indebtedness as long as such Indebtedness (A) is owing from a Borrower to another Borrower, or (B) is owing from a Subsidiary to Borrower so long as such Indebtedness is a Permitted Investment;

(x) Permitted Convertible Debt; and

(xi) extensions, refinancings and renewals of any items of Permitted Indebtedness, provided that the principal amount is not increased (other than as a result of the capitalization of interest, fees or expenses) or the terms modified to impose materially more burdensome terms upon Borrower or its Subsidiary, as the case may be.

"Permitted Investment" means:

(i) Investments existing on the Closing Date which are disclosed in Schedule 1B;

(ii) (a) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one year from the date of acquisition thereof currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Services, (b) commercial paper maturing no more than one year from the date of creation thereof and currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Service, (c) certificates of deposit issued by any bank with assets of at least $500,000,000 maturing no more than one year from the date of investment therein, and (d) money market accounts;

(iii) repurchases of stock from former employees, directors, or consultants of Borrower under the terms of applicable repurchase agreements at the original issuance price of such securities in an aggregate amount not to exceed $1,000,000 in any fiscal year, provided that no Event of Default has occurred, is continuing or could exist after giving effect to the repurchases;

(iv) Investments accepted in connection with Permitted Transfers;

(v) Investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of Borrower's business;

(vi) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions, to customers and suppliers who are not Affiliates, in the ordinary course of business, provided that this subparagraph (vi) shall not apply to Investments of Borrower in any Subsidiary;

(vii) Investments consisting of loans not involving the net transfer on a substantially contemporaneous basis of cash proceeds to employees, officers or directors relating to the purchase of capital stock of Parent pursuant to employee stock purchase plans or other similar agreements approved by Parent's Board of Directors;

(viii) Investments consisting of travel advances in the ordinary course of business;

(ix) Investments in newly-formed Subsidiaries, provided that each such Subsidiary enters into a Joinder Agreement promptly after its formation by Borrower and executes such other documents as shall be reasonably requested by Agent;

(x) Investments in Excluded Subsidiaries not to exceed $500,000 in the aggregate per month and $1,000,000 in the aggregate per fiscal year;

(xi) Investments in the MSC Subsidiary, so long as an Event of Default does not exist at the time of such Investment and would not exist after giving effect to such Investment and provided that Borrower is in compliance with Section 7.14 hereunder;

(xii) joint ventures or strategic alliances in the ordinary course of Borrower's business consisting of the nonexclusive licensing of technology, the development of technology or the providing of technical support, provided that any cash Investments by Borrower do not exceed $500,000 in the aggregate in any fiscal year and, provided, further, that, for the avoidance of doubt, any cost-sharing arrangements in connection with collaborative studies with third parties shall not be subject to any such limitation;

(xiii) Permitted Acquisitions; and

(xiv) additional Investments that do not exceed $1,000,000 in the aggregate.

"Permitted Liens" means:

(i) Liens in favor of Agent or the Lenders;

(ii) Liens existing on the Closing Date which are disclosed in Schedule 1C;

(iii) Liens for taxes, fees, assessments or other governmental charges or levies, either not yet due or being contested in good faith by appropriate proceedings diligently conducted; provided, that Borrower maintains adequate reserves therefor on Borrower's Books in accordance with GAAP;

(iv) Liens securing claims or demands of materialmen, artisans, mechanics, carriers, warehousemen, landlords and other like Persons arising in the ordinary course of Borrower's business and imposed without action of such parties; provided, that the payment thereof is not yet required;

(v) Liens arising from judgments, decrees or attachments in circumstances which do not constitute an Event of Default hereunder;

(vi) the following deposits, to the extent made in the ordinary course of business: deposits under worker's compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure statutory obligations (other than Liens arising under ERISA or environmental Liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds;

(vii) Liens on Equipment or software or other intellectual property constituting purchase money Liens and Liens in connection with capital leases securing Indebtedness permitted in clause (iii) of "Permitted Indebtedness";

(viii) Liens incurred in connection with Subordinated Indebtedness;

(ix) leasehold interests in leases or subleases and licenses granted in the ordinary course of business and not interfering in any material respect with the business of the licensor;

(x) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due;

(xi) Liens on insurance proceeds securing the payment of financed insurance premiums that are promptly paid on or before the date they become due (provided that such Liens extend only to such insurance proceeds and not to any other property or assets);

(xii) statutory and common law rights of set-off and other similar rights as to deposits of cash and securities in favor of banks, other depository institutions and brokerage firms;

(xiii) easements, zoning restrictions, rights-of-way and similar encumbrances on real property imposed by law or arising in the ordinary course of business so long as they do not materially impair the value or marketability of the related property;

(xiv) (A) Liens on Cash securing obligations permitted under clause (vii) of the definition of Permitted Indebtedness and (B) security deposits in connection with real property leases, the combination of (A) and (B) in an aggregate amount not to exceed (A) at any time prior to the achievement of the Approval Milestone, $3,500,000 at any time outstanding or (B) at any time following the achievement of the Approval Milestone, $5,000,000 at any time outstanding;

(xv) Liens on Cash securing corporate credit card obligations permitted under clause (iv) of the definition of Permitted Indebtedness, in an aggregate amount not to exceed $500,000 at any time; and

(xvi) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clauses (i) through (xi) above; provided, that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced (as may have been reduced by any payment thereon) does not increase, other than as a result of the capitalization of interest, fees and expenses thereunder.

"Permitted Transfers" means:

(i) sales of Inventory in the ordinary course of business;

(ii) non-exclusive licenses, sublicenses and similar arrangements for the use of Company IP of Borrower or Borrower Products and related assets in the ordinary course of business that could not result in a legal transfer of title of the licensed property;

(iii) exclusive licenses, sublicenses and similar arrangements for the use of Company IP of Borrower or Borrower Products and related assets in the ordinary course of business that could not result in a legal transfer of title of the licensed property that may be exclusive in respects other than territory, and that may be exclusive as to territory only as to discreet geographical areas outside of the United States of America;

(iv) exclusive licenses, sublicenses and similar arrangements for the use of Company IP of Borrower or Borrower Products and related assets in the ordinary course of business that could not result in a legal transfer of title of the licensed property that is exclusive as to territory inside the United States of America, provided that each such license (a) is for a specific product or product candidate, other than RP1 in indications related to the treatment of patients with CSCC or the treatment of patients with Melanoma who failed anti-PD1 therapy, and (b) constitutes an arms-length transaction, the terms of which, on their face, do not provide for a sale or assignment by Borrower of any Company IP;

(v) dispositions of worn-out, obsolete or surplus Equipment at fair market value in the ordinary course of business;

(vi) transfers by and among any Borrower;

(vii) the use or transfer of cash or cash equivalents in a manner that is not prohibited by the terms of this Agreement or the other Loan Documents and in the ordinary course of business;

(viii) transfers consisting of Permitted Liens or Permitted Investments;

(ix) subleases of real property or the termination of real property leases in the ordinary course of business;

(x) transactions permitted under Section 7.9; and

(xi) other transfers of assets having a fair market value of not more than $1,000,000 in the aggregate in any fiscal year.

"Person" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, other entity or government.

"Pledge Agreement" means the Pledge Agreement dated as of the Closing Date between each Borrower party thereto and Agent, as the same may from time to time be amended, restated, modified or otherwise supplemented.

"Prime Rate" means the lesser of (a) the prime rate as reported in The Wall Street Journal and (b) 7.25%.

"PSC Register" means the "PSC register" within the meaning of section 790C(10) of the Companies Act 2006.

"Public Health Laws" means all Requirements of Law relating to the procurement, development, clinical and non-clinical evaluation, product approval or licensure, manufacture, production, analysis, importation, exportation, use, handling, quality, sale, labeling, promotion, clinical trial registration or post market requirements of any drug, biologic or other product (including, without limitation, any ingredient or component of the foregoing products) subject to regulation under the Federal Food, Drug, and Cosmetic Act (21 U.S.C. § 301 et seq.) and the Public Health Service Act (42 U.S.C. § 201 et seq.), including without limitation the regulations promulgated by the FDA at Title 21 of the Code of Federal Regulations, or any other FDA Laws, and all applicable regulations promulgated by the NIH and codified at Title 42 of the Code of Federal Regulations.

"Products" means all products, software, service offerings, technical data or technology currently being designed, manufactured or sold by Borrower or any of its Subsidiaries or which Borrower or any of its Subsidiaries intends to sell, license, or distribute in the future including any products or service offerings under development, collectively, together with all products, software, service offerings, technical data or technology that have been sold, licensed or distributed by Borrower or such Subsidiary since formation.

"Qualified Cash" means the amount of Borrower's cash and cash equivalents held in accounts subject to an Account Control Agreement in favor of Agent.

"Qualified Cash A/P Amount" means the amount of Borrower's accounts payable that have not been paid within one hundred twenty (120) days from the due date of the relevant account payable, other than any such accounts payable that are being contested in good faith by appropriate proceedings and for which Borrower and its Subsidiaries maintain adequate reserves in accordance with GAAP.

"Receivables" means (i) all of Borrower's Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, letters of credit, proceeds of any letter of credit, and Letter of Credit Rights, and (ii) all customer lists, software, and business records related thereto.

"Redemption Conditions" means, with respect to any payment of cash in respect of the principal amount of any Permitted Convertible Debt, satisfaction of each of the following events: (a) no Default or Event of Default shall exist or result therefrom, and (b) both immediately before and at all times after such redemption, Borrower's Unrestricted Cash shall be no less than 150% of the aggregate outstanding amount of the Secured Obligations (inclusive of any Prepayment Charge and End of Term Charge that would be due and owing if the outstanding Term Loan Advances were prepaid at the time of measurement) *plus* the Qualified Cash A/P Amount.

"Register" has the meaning specified in Section 11.7.

"Registrations" means authorizations, approvals, licenses, permits, certificates, registrations, listings, or exemptions of or issued by any governmental authority (including marketing approvals, investigational new drug applications, product recertifications, drug manufacturing establishment registration and product listing, pricing and reimbursement approvals, labeling approvals or their foreign equivalent) that are required for the research, development, manufacture, commercialization, distribution, marketing, storage, transportation, pricing, governmental authority reimbursement, use and sale of Products.

"Regulatory Action" means an administrative or regulatory enforcement action, proceeding or investigation, warning letter, untitled letter, Form 483 or similar inspectional observations, other notice of violation letter, recall, seizure, Section 305 notice or other similar written communication, or consent decree, issued or required by the FDA or under the Public Health Laws, the NIH or a comparable governmental authority in any other regulatory jurisdiction.

"Replimune UK" means Replimune Limited, a company incorporated in England and Wales with registered number 09496393 whose registered address is 69 Innovation Drive, Milton Park, Oxfordshire, OX14 4RQ, United Kingdom.

"Required Lenders" means at any time, the holders of more than 50% of the sum of the aggregate unpaid principal amount of the Term Loan then outstanding.

"Requirements of Law" means, with respect to any Person, collectively, the common law and all federal, state, provincial, local, foreign, multinational or international laws,

statutes, codes, treaties, standards, rules and regulations, guidelines, ordinances, orders, judgments, writs, injunctions, decrees (including administrative or judicial precedents or authorities) and the interpretation or administration thereof by, and other determinations, directives, requirements or requests of, any governmental authority, in each case that are applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

"Resolution Authority" means any body which has authority to exercise any Writedown and Conversion Powers.

"Revenue Milestone" means the satisfaction of each of the following events: (a) no Default or Event of Default shall have occurred and be continuing and (b) Borrower shall have delivered evidence satisfactory to Agent (as determined by Agent in its sole discretion) that after the Closing Date and prior to November 30, 2025, Borrower has achieved at least Ninety-Five Million Dollars ($95,000,000) in T6M Net Product Revenue.

"Sanctioned Country" shall mean, at any time, a country or territory which is the subject or target of any Sanctions.

"Sanctioned Person" shall mean, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or by the United Nations Security Council, the European Union or any EU member state, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person controlled by any such Person.

"Sanctions" shall mean economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or (b) the United Nations Security Council, the European Union or Her Majesty's Treasury of the United Kingdom.

"Secured Obligations" means Borrower's obligations under this Agreement and any Loan Document, including any obligation to pay any amount now owing or later arising hereunder or thereunder.

"Subordinated Indebtedness" means Indebtedness subordinated to the Secured Obligations in amounts and on terms and conditions reasonably satisfactory to Agent and subject to a subordination agreement in form and substance reasonably satisfactory to Agent.

"Subsequent Financing" means the closing of any publicly-marketed equity issuance by Parent effected pursuant to a Registration Statement filed by Parent with the Securities and Exchange Commission and which becomes effective after the Closing Date.

"Subsidiary" means an entity, whether corporate, partnership, limited liability company, joint venture or otherwise, in which Borrower owns or controls 50% or more of the outstanding voting securities, including each entity listed on Schedule 1 hereto.

"T3M Net Product Revenue" means Net Product Revenue, measured on a trailing three-month basis as of the date of the most recently delivered monthly financial statements in accordance with Section 7.1(a).

"T6M Net Product Revenue" means Net Product Revenue, measured on a trailing six-month basis as of the date of the most recently delivered monthly financial statements in accordance with Section 7.1(a).

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any governmental authority, including any interest, additions to tax or penalties applicable thereto.

"Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrower in a principal amount not to exceed the amount set forth under the heading "Term Commitment" opposite such Lender's name on Schedule 1.1.

"Term Loan Advance" means each Tranche 1 Advance, Tranche 2 Advance, Tranche 3 Advance, Tranche 4 Advance, Tranche 5 Advance, Tranche 6 Advance and any other Term Loan funds advanced under this Agreement.

"Term Loan Cash Interest Rate" means for any day a per annum rate of interest equal to the greater of either (i) 7.25% and (ii) the Prime Rate plus 1.75%.

"Term Loan PIK Interest Rate" means 1.50%.

"Term Loan Maturity Date" means October 1, 2027; provided however, that if such day is not a Business Day, the Term Loan Maturity Date shall be the immediately preceding Business Day.

"Trademark License" means any written agreement granting any right to use any Trademark or Trademark registration, now owned or hereafter acquired by Borrower or in which Borrower now holds or hereafter acquires any interest.

"Trademarks" means all trademarks (registered, common law or otherwise) and any applications in connection therewith, including registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States of America, the United Kingdom, any State thereof or any other country or any political subdivision thereof.

"Tranche 1" means the Advances pursuant to Section 2.2(a).

"Tranche 2" means the Advances pursuant to Section 2.2(b).

"Tranche 3" means the Advance pursuant to Section 2.2(c).

"Tranche 3 Facility Charge" means zero point five percent (0.50%) of each Tranche 3 Advance, which is payable to the Lenders in accordance with Section 4.2(e).

"Tranche 3 Milestone" means the satisfaction of each of the following events: (a) no Default or Event of Default shall have occurred and be continuing and (b) Parent shall have stated in Parent's public filings with the Securities and Exchange Commission (as confirmed by Agent in its reasonable discretion) that it has received FDA acceptance of Borrower's first BLA for either indications related to (i) the commercialization of RP1 for the treatment of patients with CSCC or (ii) the commercialization of RP1 for the treatment of patients with Melanoma who failed anti-PD1 therapy.

"Tranche 4" means the Advances pursuant to Section 2.2(d).

"Tranche 4 Facility Charge" means zero point five percent (0.50%) of each Tranche 4 Advance, which is payable to the Lenders in accordance with Section 4.2(f).

"Tranche 5" means the Advances pursuant to Section 2.2(e).

"Tranche 5 Facility Charge" means zero point five percent (0.50%) of each Tranche 5 Advance, which is payable to the Lenders in accordance with Section 4.2(g).

"Tranche 6" means the Advances pursuant to Section 2.2(f).

"Tranche 6 Facility Charge" means zero point five percent (0.50%) of each Tranche 6 Advance, which is payable to the Lenders in accordance with Section 4.2(h).

"UCC" means the Uniform Commercial Code as the same is, from time to time, in effect in the State of New York; provided, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection or priority of, or remedies with respect to, Agent's Lien on any Collateral is governed by the Uniform Commercial Code as the same is, from time to time, in effect in a jurisdiction other than the State of New York, then the term "UCC" shall mean the Uniform Commercial Code as in effect, from time to time, in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions.

"Unrestricted Cash" means unrestricted Cash of Borrower maintained in Deposit Accounts or other accounts in Borrower's name subject to an Account Control Agreement in favor of Agent.

"UK" means the United Kingdom.

"UK Bail-In Legislation" means (to the extent that the United Kingdom is not an EEA Member Country which has implemented, or implements, Article 55 BRRD) Part I of the United Kingdom Banking Act 2009 and any other law or regulation applicable in the United Kingdom relating to the resolution of unsound or failing banks, investment firms or other financial institutions or their affiliates (otherwise than through liquidation, administration or other insolvency proceedings).

"UK PSC Loan Party" means a company incorporated in England and Wales who is required to maintain a PSC Register and whose shares are pledged as Collateral.

"UK Withholding Tax" means any Taxes imposed by way of deduction or withholding by the UK.

"U.S. Person" means any Person that is a "United States person" as defined in Section 7701(a)(30) of the Code.

"Write-down and Conversion Powers" means:

(a) in relation to any Bail-In Legislation described in the EU Bail-In Legislation Schedule from time to time, the powers described as such in relation to that Bail-In Legislation in the EU Bail-In Legislation Schedule;

(b) in relation to any other applicable Bail-In Legislation: 14

(i) any powers under that Bail-In Legislation to cancel, transfer or dilute shares issued by a person that is a bank or investment firm or other financial institution or affiliate of a bank, investment firm or other financial institution, to cancel, reduce, modify or change the form of a liability of such a person or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that Bail-In Legislation that are related to or ancillary to any of those powers; and

(ii) any similar or analogous powers under that Bail-In Legislation; and

(c) in relation to any UK Bail-In Legislation:

(i) any powers under that UK Bail-In Legislation to cancel, transfer or dilute shares issued by a person that is a bank or investment firm or other financial institution or affiliate of a bank, investment firm or other financial institution, to cancel, reduce, modify or change the form of a liability of such a person or any contract or instrument under which that liability arises, to convert all or part of that liability into shares, securities or obligations of that person or any other person, to provide that any such contract or instrument is to have effect as if a right had been exercised under it or to suspend any obligation in respect of that liability or any of the powers under that UK Bail-In Legislation that are related to or ancillary to any of those powers; and

(ii) any similar or analogous powers under that UK Bail-In Legislation.

1.2 The following terms are defined in the Sections or subsections referenced opposite such terms:

Defined Term	Section

Agent	Preamble
Assignee	11.14
Borrower	Preamble
Claims	11.10
Collateral	3.3
Confidential Information	11.22
Current Company IP	5.10(a)
Event of Default	9
Financial Statements	7.1
Indemnified Person	6.3
Lenders	Preamble
Liabilities	6.3
Maximum Rate	2.3
Open Source License	5.10
Participant Register	11.8
Perfection Certificate	4.1(g)
Performance Covenant	7.22(b)
Prepayment Charge	2.5(a)
Process Letter	Addendum 4
Publicity Materials	11.19
Register	11.7
Regulation	5.15
Third Party IP	5.10(i)
Rights to Payment	3.1
SBA	7.24
SBIC	7.24
SBIC Act	7.24
Tranche 1 Advance	2.2(a)
Tranche 2 Advance	2.2(b)
Tranche 3 Advance	2.2(c)
Tranche 4 Advance	2.2(d)
Tranche 5 Advance	2.2(e)
Tranche 6 Advance	2.2(f)
UCC Collateral	3.1

1.3 Unless otherwise specified, all references in this Agreement or any Annex or Schedule hereto to a "Section," "subsection," "Exhibit," "Annex," or "Schedule" shall refer to the corresponding Section, subsection, Exhibit, Annex, or Schedule in or to this Agreement. Unless otherwise specifically provided herein, any accounting term used in this Agreement or the other Loan Documents shall have the meaning customarily given such term in accordance with GAAP, and all financial computations hereunder shall be computed in accordance with GAAP, consistently applied. Unless otherwise defined herein or in the other Loan Documents, terms that are used herein or in the other Loan Documents and defined in the UCC shall have the meanings given to them in the UCC. For all purposes under the Loan Documents, in connection

with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction's laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its Equity Interests at such time.

1.4 All references in this Agreement or any Annex or Schedule hereto a "regulation" includes any regulation, rule, official directive, request or guideline (whether or not having the force of law) of any governmental, intergovernmental or supranational body, agency, department or of any regulatory, self-regulatory or other authority or organization.

1.5 Notwithstanding anything in the definition of GAAP to the contrary, any obligations under a lease (whether existing now or entered into in the future) that is not (or would not be) a capital lease under GAAP as in effect prior to giving effect to FASB Accounting Standards Update No. 2016-02, Leases, shall not be treated as a capital lease solely as a result of the adoption of changes in GAAP.

SECTION 2 THE LOAN

2.1 [Reserved]

2.2 Term Loan Advances.

(a) Tranche 1 Advance. Subject to the terms and conditions of this Agreement, on the Closing Date, the Lenders shall severally (and not jointly) make, and Borrower agrees to draw, an initial Term Loan Advance in an aggregate principal amount not less than Thirty Million Dollars ($30,000,000); provided that Borrower may request, and the Lenders shall severally (and not jointly) make, in each case on or prior to September 30, 2023, one additional Term Loan Advance in minimum increments of Ten Million Dollars ($10,000,000) (or if less than Ten Million Dollars ($10,000,000), the remaining amount of Term Loan Advances available to be drawn pursuant to this Section 2.2(a)); provided, further that the aggregate amount of Term Loan Advances made under this Section 2.2(a) shall not exceed $60,000,000 (each such Term Loan Advance, a "Tranche 1 Advance").

(b) Tranche 2 Advance. Subject to the terms and conditions of this Agreement and the achievement of the Clinical Milestone, beginning upon the earlier of (i) the drawing of 100% of the Term Commitment in respect of the Tranche 1 Advances or (ii) September 30, 2023, Borrower may request, and the Lenders shall severally (and not jointly) make, in each case on or prior to December 31, 2023, one Term Loan Advance in an aggregate principal amount of Fifteen Million Dollars ($15,000,000) (the "Tranche 2 Advance").

(c) Tranche 3 Advance. Subject to the terms and conditions of this Agreement and the achievement of the Tranche 3 Milestone, Borrower may request, and the Lenders shall severally (and not jointly) make, in each case on or prior to the earlier of (i) September 30, 2024 or (ii) sixty (60) days following the achievement of the

Tranche 3 Milestone, additional Term Loan Advances in an aggregate principal amount up to Twenty-Five Million Dollars ($25,000,000), in minimum draws of at least Ten Million Dollars ($10,000,000) (or if less than Ten Million Dollars ($10,000,000), the remaining amount of Term Loan Advances available to be drawn pursuant to this Section 2.2(c)) (each, a "Tranche 3 Advance"); provided that Borrower shall not be permitted to request more than two (2) Tranche 3 Advances in total.

(d) Tranche 4 Advance. Subject to the terms and conditions of this Agreement and the achievement of the Approval Milestone, Borrower may request, and the Lenders shall severally (and not jointly) make, in each case on or prior to the earlier of (i) March 31, 2025 or (ii) sixty (60) days following the achievement of the Approval Milestone, additional Term Loan Advances in an aggregate principal amount up to Thirty-Five Million Dollars ($35,000,000), in minimum draws of at least Ten Million Dollars ($10,000,000) (or if less than Ten Million Dollars ($10,000,000), the remaining amount of Term Loan Advances available to be drawn pursuant to this Section 2.2(d)) (each, a "Tranche 4 Advance"); provided that Borrower shall not be permitted to request more than two (2) Tranche 4 Advances in total.

(e) Tranche 5 Advance. Subject to the terms and conditions of this Agreement and the achievement of the Revenue Milestone, Borrower may request, and the Lenders shall severally (and not jointly) make, in each case on or prior to the earlier of (i) December 15, 2025 or (ii) sixty (60) days following the achievement of the Revenue Milestone, additional Term Loan Advances in an aggregate principal amount up to Forty Million Dollars ($40,000,000), in minimum draws of at least Ten Million Dollars ($10,000,000) (or if less than Ten Million Dollars ($10,000,000), the remaining amount of Term Loan Advances available to be drawn pursuant to this Section 2.2(e)) (each, a "Tranche 5 Advance"); provided that Borrower shall not be permitted to request more than two (2) Tranche 5 Advances in total.

(f) Tranche 6 Advance. Subject to the terms and conditions of this Agreement and conditioned on approval by the Lenders' respective investment committees in their sole and unfettered discretion, Borrower may request, and the Lenders shall severally (and not jointly) make, in each case prior to the Amortization Date, additional Term Loan Advances in an aggregate principal amount of up to Twenty-Five Million Dollars ($25,000,000), in minimum draws of at least Ten Million Dollars ($10,000,000) (or if less than Ten Million Dollars ($10,000,000), the remaining amount of Term Loan Advances available to be drawn pursuant to this Section 2.2(f)) (each, a "Tranche 6 Advance"); provided that Borrower shall not be permitted to request more than two (2) Tranche 6 Advances in total.

The aggregate outstanding Term Loan Advances shall not exceed the Maximum Term Loan Amount. Each Term Loan Advance of each Lender shall not exceed its respective Term Commitment.

(g) Advance Request. To obtain a Term Loan Advance, Borrower shall complete, sign and deliver an Advance Request (at least five (5) Business Days before the Advance Date other than the Closing Date, which shall be at least one (1) Business

Day) to Agent. The Lenders shall fund the Term Loan Advance in the manner requested by the Advance Request provided that each of the conditions precedent to such Term Loan Advance is satisfied as of the requested Advance Date.

(h) Interest.

(i) Term Loan Cash Interest Rate. In addition to interest accrued pursuant to the Term Loan PIK Interest Rate, the principal balance (including, for the avoidance of doubt, any payment-in-kind interest added to principal pursuant to Section 2.2(h)(ii)) of each Term Loan Advance shall bear interest thereon from such Advance Date at the Term Loan Cash Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed. The Term Loan Cash Interest Rate will float and change on the day the prime rate changes from time to time.

(ii) Term Loan PIK Interest Rate. In addition to interest accrued pursuant to the Term Loan Cash Interest Rate, the principal balance of each Term Loan Advance shall bear interest thereon from the applicable Advance Date therefor at the Term Loan PIK Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed, which amount shall be added to the outstanding principal balance so as to increase the outstanding principal balance of such Term Loan Advance on each payment date for such Advance, which principal amount shall accrue interest payable as provided in Section 2.2(h)(i) and which accrued and unpaid amount shall be payable when the principal amount of the Advance is payable in accordance with Section 2.2(i).

(i) Payment. Borrower will pay interest on each Term Loan Advance on the first Business Day of each month, beginning the month after the Advance Date. Borrower shall repay the aggregate Term Loan principal balance that is outstanding on the day immediately preceding the Amortization Date, in equal monthly installments of principal and interest (mortgage style) beginning on the Amortization Date and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations) are repaid. The entire Term Loan principal balance and all accrued but unpaid interest hereunder, shall be due and payable on Term Loan Maturity Date. Borrower shall make all payments under this Agreement without setoff, recoupment or deduction and regardless of any counterclaim or defense. The Lenders will initiate debit entries to Borrower's account as authorized on the ACH Authorization (i) on each payment date of all periodic obligations payable to the Lenders under each Term Advance and (ii) out-of-pocket legal fees and costs incurred by Agent or the Lenders in accordance with Section 11.12 of this Agreement; provided that, with respect to clause (i) above, in the event that the Lenders or Agent informs Borrower that the Lenders will not initiate a debit entry to Borrower's account for a certain amount of the periodic obligations due on a specific payment date, Borrower shall pay to the Lenders such amount of periodic obligations in full in immediately available funds on such payment date; provided, further, that, with respect to clause (i) above, if the Lenders or Agent informs Borrower that the Lenders will not initiate a debit entry as described

above later than the date that is three (3) Business Days prior to such payment date, Borrower shall pay to the Lenders such amount of periodic obligations in full in immediately available funds on the date that is three (3) Business Days after the date on which the Lenders or Agent notifies Borrower of such; provided, further, that, with respect to clause (ii) above, in the event that the Lenders or Agent informs Borrower that the Lenders will not initiate a debit entry to Borrower's account for certain amount of such out-of-pocket legal fees and costs incurred by Agent or the Lenders, Borrower shall pay to the Lenders such amount in full in immediately available funds within three (3) Business Days.

2.3 Maximum Interest. Notwithstanding any provision in this Agreement or any other Loan Document, it is the parties' intent not to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law that a court of competent jurisdiction shall deem applicable hereto (the "Maximum Rate"). If a court of competent jurisdiction shall finally determine that Borrower has actually paid to the Lenders an amount of interest in excess of the amount that would have been payable if all of the Secured Obligations had at all times borne interest at the Maximum Rate, then such excess interest actually paid by Borrower shall be applied as follows: first, to the payment of the Secured Obligations consisting of the outstanding principal; second, after all principal is repaid, to the payment of the Lenders' accrued interest, costs, expenses, professional fees and any other Secured Obligations; and third, after all Secured Obligations are repaid, the excess (if any) shall be refunded to Borrower.

2.4 Default Interest. In the event any payment is not paid on the scheduled payment date, an amount equal to four percent (4%) of the past due amount shall be payable on demand. In addition, upon the occurrence and during the continuation of an Event of Default hereunder, all Secured Obligations, including principal, interest, compounded interest, and professional fees, shall bear interest at a rate per annum equal to the rate set forth in Section 2.2(h), plus four percent (4%) per annum. In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 2.2(h) or Section 2.4, as applicable.

2.5 Prepayment. At its option, upon at least five (5) Business Days' prior written notice to Agent, Borrower may prepay all or a portion of the outstanding Advances by paying the entire principal balance (or such portion thereof), all accrued and unpaid interest thereon, together with a prepayment charge equal to the following percentage of the Advance amount being prepaid: with respect to each Advance (which Advance amount shall include, for the avoidance of doubt, any principal that has been added to the principal balance of such Advance pursuant to Section 2.2(h)(ii)), if such Advance amounts are prepaid in any of the first twelve (12) months following the Closing Date, 3.00%; after twelve (12) months but on or prior to twenty four (24) months following the Closing Date, 2.00%; and thereafter, 1.00% (each, a "Prepayment Charge"); provided that each prepayment shall be in a minimum principal amount of Ten Million Dollars ($10,000,000) or, if less, the remaining outstanding principal amount of the Advances. If at any time Borrower elects to make a prepayment, and at such time, there are outstanding Advances under multiple Tranches, the Prepayment Charge shall be determined by applying the amount of such prepayment in the following order: first, to the outstanding principal amount (and accrued but unpaid interest thereon) of Advances outstanding under the Tranche with the latest initial funding date; second, to the outstanding principal amount (and accrued but

unpaid interest thereon) of Advances outstanding under the Tranche with the next latest initial funding date and so on until the entire principal balance of all Advances made hereunder (and all accrued but unpaid interest thereon) is paid in full. Borrower agrees that the Prepayment Charge is a reasonable calculation of the Lenders' lost profits in view of the difficulties and impracticality of determining actual damages resulting from an early repayment of the Advances. Borrower shall prepay the outstanding amount of all principal and accrued interest through the prepayment date and the Prepayment Charge upon the occurrence of a Change in Control or any other prepayment hereunder. Notwithstanding the foregoing, Agent and the Lenders hereby waive the Prepayment Charge if Agent and the Lenders or any Affiliate thereof (in their sole and absolute discretion) provide any refinancing of the Advances prior to the Term Loan Maturity Date. For the avoidance of doubt, if a payment hereunder becomes due and payable on a day that is not a Business Day, the due date thereof shall be the immediately succeeding Business Day.

2.6 End of Term Charge.

(a) On any date that Borrower partially prepays the outstanding Secured Obligations pursuant to Section 2.5 (other than, for the avoidance of doubt, any partial prepayment that would result in all remaining outstanding Secured Obligations being prepaid in full), Borrower shall pay the Lenders a charge of equal to four point ninety-five percent (4.95%) of the aggregate principal amount of such Term Loan Advances being prepaid.

(b) On the earliest to occur of (i) the Term Loan Maturity Date, (ii) the date that Borrower prepays the outstanding Secured Obligations (other than any inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) in full, or (iii) the date that the Secured Obligations become due and payable (including by acceleration of the Secured Obligations during an Event of Default) pursuant to the terms of this Agreement, Borrower shall pay the Lenders a charge equal to (i) four point ninety-five percent (4.95%) of the aggregate original principal amount of the Term Loan Advances made hereunder *minus* (ii) the aggregate amount of payments made pursuant to Section 2.6(a) (collectively, with any charge required to be paid pursuant to Section 2.6(a), the "End of Term Charge").

(c) Notwithstanding the required payment date of such End of Term Charge, the applicable pro rata portion of the End of Term Charge with respect to any Advance shall be deemed earned by the Lenders as of the applicable Advance Date. For the avoidance of doubt, if a payment hereunder becomes due and payable on a day that is not a Business Day, the due date thereof shall be the immediately preceding Business Day.

2.7 Pro Rata Treatment. Each payment (including prepayment) on account of any fee and any reduction of the Term Loan shall be made pro rata according to the Term Commitments of the relevant Lender.

2.8 Taxes; Increased Costs. Borrower, the Agent and the Lenders each hereby agree to the terms and conditions set forth on Addendum 1 attached hereto.

2.9 Treatment of Prepayment Charge and End of Term Charge. Borrower agrees that any Prepayment Charge and any End of Term Charge payable shall be presumed to be the liquidated damages sustained by each Lender as the result of the early termination, and Borrower agrees that it is reasonable under the circumstances currently existing and existing as of the Closing Date. The Prepayment Charge and the End of Term Charge shall also be payable in the event the Secured Obligations (and/or this Agreement) are satisfied or released by foreclosure (whether by power of judicial proceeding), deed in lieu of foreclosure, or by any other means. Borrower expressly waives (to the fullest extent it may lawfully do so) the provisions of any present or future statute or law that prohibits or may prohibit the collection of the foregoing Prepayment Charge and End of Term Charge in connection with any such acceleration. Borrower agrees (to the fullest extent that each may lawfully do so): (a) each of the Prepayment Charge and the End of Term Charge is reasonable and is the product of an arm's length transaction between sophisticated business people, ably represented by counsel; (b) each of the Prepayment Charge and the End of Term Charge shall be payable notwithstanding the then prevailing market rates at the time payment is made; (c) there has been a course of conduct between the Lenders and Borrower giving specific consideration in this transaction for such agreement to pay the Prepayment Charge and the End of Term Charge as a charge (and not interest) in the event of prepayment or acceleration; and (d) Borrower shall be estopped from claiming differently than as agreed to in this paragraph. Borrower expressly acknowledges that their agreement to pay each of the Prepayment Charge and the End of Term Charge to the Lenders as herein described was on the Closing Date and continues to be a material inducement to the Lenders to provide the Term Loan.

SECTION 3 SECURITY INTEREST

3.1 As security for the prompt and complete payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, each Borrower grants to Agent a security interest in all of such Borrower's right, title, and interest in, to and under all of such Borrower's personal property and other assets including without limitation the following (except as set forth herein) whether now owned or hereafter acquired (collectively, the "UCC Collateral"): (a) Receivables; (b) Equipment; (c) Fixtures; (d) General Intangibles (other than Company IP); (e) Inventory; (f) Investment Property; (g) Deposit Accounts; (h) Cash; (i) Goods; and all other tangible and intangible personal property of Borrower whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrower and wherever located, and any of Borrower's property in the possession or under the control of Agent (in each case other than Company IP); and, to the extent not otherwise included, all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing; provided, however, that the Collateral shall include all Accounts and General Intangibles that consist of rights to payment and proceeds from the sale, licensing or disposition of all or any part, or rights in, the Company IP (the "Rights to Payment"). Notwithstanding the foregoing, if a judicial authority (including a U.S. Bankruptcy Court) holds that a security interest in the underlying Company IP is necessary to have a security interest in the Rights to Payment, then the UCC Collateral shall automatically, and effective as of the date of this Agreement, include the Company IP to the extent necessary to permit perfection of Agent's security interest in the Rights to Payment.

3.2 Notwithstanding the broad grant of the security interest set forth in Section 3.1, above, the term "UCC Collateral" shall not include (a) any governmental licenses or state or local charters and authorizations to the extent a security interest is prohibited or restricted by any applicable law (except to the extent such prohibition or restriction is ineffective under the UCC or other applicable law), but only for so long as such prohibition or restriction exists, (b) any property owned by any Borrower that is subject to a purchase money Lien or a capital lease or similar arrangement permitted by this Agreement to the extent that the obligation pursuant to which such Lien is granted (or in the document, instrument or agreement providing for such capital lease) prohibits (or causes a default thereunder), invalidates such obligation, document, instrument or agreement or provides a right of termination in favor of any other party thereto (other than the applicable Borrower and its Affiliates) by granting, any other Lien or interest on such property (but only to the extent (i) such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9-406, 9-407 and 9-408 of the UCC and (ii) no consent or waiver has been obtained that would permit Agent's security interest or lien to attach notwithstanding the prohibition or restriction on such property subject to such purchase money Lien or capital lease), (c) nonassignable licenses or contracts, which by their terms require the consent of the licensor thereof or another party (but only to the extent (i) such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9-406, 9-407 and 9-408 of the UCC and (ii) no consent or waiver has been obtained that would permit Agent's security interest or lien to attach notwithstanding the prohibition or restriction on the pledge of such lease, license or agreement), (d) any property to the extent that Agent, in its sole discretion, determines that the cost and/or burden of obtaining a security interest in such property outweigh the benefit to the Agent and the Lenders and (e) any Excluded Account. For the avoidance of doubt, the foregoing exclusions of clauses (b) and (c) shall in no way be construed to limit, impair, or otherwise affect any of Agent's continuing security interests in and liens upon any rights or interests of any Borrower in or to (x) monies due or to become due under or in connection with any described lease, license or agreement or the property subject to such purchase money lien or capital lease, or (y) any proceeds from the sale, license, lease, or other dispositions of any such ease, license or agreement or the property subject to such purchase money lien or capital lease.

3.3 Parent and Replimune UK have entered into the English Security Documents pursuant to which they have granted security interests on, to and under the collateral described therein (such collateral, with the UCC Collateral, collectively, the "Collateral"). Solely with respect to Replimune UK, in the event of a conflict between Section 3.1 of this Agreement and the terms of the English Debenture, the terms of the English Debenture shall govern and control.

SECTION 4 CONDITIONS PRECEDENT TO LOAN

The obligations of the Lenders to make the Loan hereunder are subject to the satisfaction by Borrower of the following conditions:

4.1 Initial Advance. On or prior to the Closing Date, Borrower shall have delivered to Agent the following:

(a) executed copies of the Loan Documents, Account Control Agreements, and all other documents and instruments reasonably required by Agent to effectuate the

transactions contemplated hereby or to create and perfect the Liens of Agent with respect to all Collateral, in all cases in form and substance reasonably acceptable to Agent;

(b) a legal opinion of Agent's U.K. counsel in form and substance reasonably acceptable to Agent;

(c) certified copy of resolutions of each Borrower's Board of Directors (and shareholder, with respect to Replimune UK) evidencing (i) approval of the Loan and other transactions evidenced by the Loan Documents (ii) authorizing a specified person or persons to execute the Loan Documents to which it is a party on its behalf; (iii) authorizing a specified person or persons, on its behalf, to sign and/or dispatch all documents and notices (including, if relevant, any Advance Request or other relevant notice) to be signed and/or dispatched by it under or in connection with the Loan Documents to which it is a party; and (iv) (A) acknowledging that the Board of Directors are acting for a proper purpose and that the Loan Documents are in the best interests of that Borrower and for its commercial benefit; and (B) acknowledging that the relevant Borrower was solvent and there were reasonable grounds to expect that the relevant Borrower would continue to be solvent after executing and complying with its obligations under the Loan Documents;

(d) certified copies of the constitutional documents and (as applicable) the Bylaws, as amended through the Closing Date, of Borrower;

(e) other than with respect to Replimune UK, a certificate of good standing for Borrower from its state of incorporation and similar certificates from all other jurisdictions in which it does business and where the failure to be qualified would reasonably be expected to have a Material Adverse Effect;

(f) a certificate of a director of Replimune UK confirming that guaranteeing or securing the Loan would not cause any guaranteeing or similar limit binding on Replimune UK to be exceeded and certifying that each copy document relating to it specified in this Section 4, is correct, complete and the original of such copy document, is in full force and effect and has not been amended or superseded as at a date no earlier than the Closing Date;

(g) a perfection certificate (the "**Perfection Certificate**") of Borrower, together with duly executed signatures thereto;

(h) certified copies, dated as of a recent date, of searches for financing statements filed in the central filing office of the State of Delaware and with the Companies House;

(i) in respect to any UK PSC Loan Party, a copy of the PSC Register together with confirmation from an authorized signatory that no "warning notice" or "restrictions notice" (in each case as defined in Schedule 1B of the Companies Act 2006) has been issued in respect of the shares pledged as Collateral;

(j) current searches at the U.S. Patent and Trademark Office or the U.S. Copyright Office (and the equivalent in the UK), as applicable, listing issued or pending Current Company IP of Borrower;

(k) payment of the Initial Facility Charge and reimbursement of Agent's and the Lenders' current expenses reimbursable pursuant to this Agreement, which amounts may be deducted from the initial Advance, it being understood and agreed that the Due Diligence Fee previously paid shall be applied to the payment of the non-legal transaction costs and due diligence expenses

(l) all certificates of insurance, endorsements and copies of each insurance policy required hereunder; and

(m) such other documents as Agent may reasonably request.

4.2 All Advances. On each Advance Date:

(a) Agent shall have received (i) an Advance Request for the relevant Advance as required by Section 2.2(g), each duly executed by Borrower's Chief Executive Officer or Chief Financial Officer, and (ii) any other documents related to Borrower's business or financial condition that Agent, in good faith, may reasonably request promptly upon or prior to its receipt of such Advance Request, so long as such request does not result in the intentional delay or denial of the relevant Advance without cause.

(b) The representations and warranties set forth in this Agreement shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date.

(c) At the time of and immediately after such Advance no Default or Event of Default shall have occurred and be continuing.

(d) With respect to the Tranche 3 Advance, Borrower shall have paid the Tranche 3 Facility Charge (which amount may be deducted from such Tranche 3 Advance).

(e) With respect to any Tranche 4 Advance, Borrower shall have paid the Tranche 4 Facility Charge (which amount may be deducted from such Tranche 4 Advance).

(f) With respect to any Tranche 5 Advance, Borrower shall have paid the Tranche 5 Facility Charge (which amount may be deducted from such Tranche 5 Advance).

(g) With respect to any Tranche 6 Advance, Borrower shall have paid the Tranche 6 Facility Charge (which amount may be deducted from such Tranche 6 Advance).

(h) Each Advance Request shall be deemed to constitute a representation and warranty by Borrower on the relevant Advance Date as to the matters specified in paragraphs (b) and (c) of this Section 4.2 and as to the matters set forth in the Advance Request.

4.3 No Default. As of the Closing Date and each Advance Date, (i) no Default or Event of Default shall have occurred and be continuing, and (ii) no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

4.4 Post-Closing Deliverables. Borrower shall deliver the documents or satisfy the conditions, as applicable, in accordance with Schedule 4.4 hereto.

SECTION 5 REPRESENTATIONS AND WARRANTIES OF BORROWER

Borrower represents and warrants that:

5.1 Corporate Status. Each Borrower is an entity of the type described on Exhibit B, duly organized, legally existing and, to the extent applicable, is in good standing under the laws of its applicable jurisdiction or state of formation, and, to the extent applicable, is duly qualified as a foreign corporation in all jurisdictions in which the nature of its business or location of its properties require such qualifications and where the failure to be qualified would reasonably be expected to have a Material Adverse Effect. Borrower's present name, former names (if any), locations, place of formation, Tax identification number, organizational identification number, if applicable, and other information are correctly set forth in Exhibit B, as may be updated by Borrower in a written notice (including any Compliance Certificate) provided to Agent after the Closing Date.

5.2 Collateral. Borrower owns the Collateral and the Current Company IP, free of all Liens, except for Permitted Liens. Borrower has the power and authority to grant to Agent a Lien in the Collateral as security for the Secured Obligations.

5.3 Consents. Borrower's execution, delivery and performance of this Agreement and all other Loan Documents, (i) have been duly authorized by all necessary corporate or other requisite action of Borrower, (ii) will not result in the creation or imposition of any Lien upon the Collateral, other than Permitted Liens and the Liens created by this Agreement and the other Loan Documents, (iii) do not violate any provisions of Borrower's constitutional or governing documents, (iv) do not violate any material law, regulation, order, injunction, judgment, decree or writ to which Borrower is subject and (v) except as described on Schedule 5.3, do not violate any material contract or agreement or require the consent or approval of any other Person which has not already been obtained. The individual or individuals executing the Loan Documents are duly authorized to do so.

5.4 Material Adverse Effect. No event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing. Borrower is not aware of any event likely to occur that is reasonably expected to result in a Material Adverse Effect.

5.5 Actions Before Governmental Authorities. There are no actions, suits or proceedings at law or in equity or by or before any governmental authority now pending or, to

the knowledge of Borrower, threatened against or affecting Borrower or its property, that is reasonably expected to result in a Material Adverse Effect.

5.6 Laws. Neither Borrower nor any of its Subsidiaries is in violation of any law, rule or regulation, or in default with respect to any judgment, writ, injunction or decree of any governmental authority, where such violation or default is reasonably expected to result in a Material Adverse Effect. Borrower is not in default in any manner under any provision of any agreement or instrument evidencing material Indebtedness, or any other material agreement to which it is a party or by which it is bound.

Neither Borrower nor any of its Subsidiaries is an "investment company" or a company "controlled" by an "investment company" under the Investment Company Act of 1940, as amended. Neither Borrower nor any of its Subsidiaries is engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Borrower and each of its Subsidiaries has complied in all material respects with the Federal Fair Labor Standards Act. Neither Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. Neither Borrower's nor any of its Subsidiaries' properties or assets has been used by Borrower or such Subsidiary or, to Borrower's Knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than in material compliance with applicable laws. Borrower and each of its Subsidiaries has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted.

None of Borrower, any of its Subsidiaries, nor, to Borrower's knowledge, any of Borrower's or its Subsidiaries' Affiliates or any of their respective agents, acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement is (i) in violation of any Anti Terrorism Law, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti Terrorism Law, or (iii) is a Blocked Person. None of Borrower, any of its Subsidiaries, nor to the knowledge of Borrower, any of their Affiliates or agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti Terrorism Law. None of the funds to be provided under this Agreement will be used, directly or indirectly, (a) for any activities in violation of any applicable anti-money laundering, economic sanctions and anti-bribery laws and regulations or (b) for any payment to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended.

5.7 Information Correct and Current. No information, report, Advance Request, financial statement, exhibit or schedule (other than financial or business projections or forecasts)

furnished, by or on behalf of Borrower to Agent in connection with any Loan Document or included therein or delivered pursuant thereto, when taken as a whole, contained, contains or will contain any material misstatement of fact or, when taken together with all other such information or documents, omitted, omits or will omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were, are or will be made, not materially misleading at the time such statement was made or deemed made. Additionally, any and all financial or business projections or forecasts provided by Borrower to Agent, whether prior to or after the Closing Date, shall be (i) provided in good faith and based on the most current data and information available to Borrower, and (ii) the most current of such projections or forecasts provided to Borrower's Board of Directors; it being understood by the Agent and the Lender that such projections or forecasts as to future events (x) are not to be viewed as facts, (y)(1) are subject to significant uncertainties and contingencies, many of which are beyond the control of Borrower, (2) no assurance is given by Borrower that the results forecast in any such projections or forecasts will be realized, and (3) the actual results during the period or periods covered by any such projections or forecasts may differ from the forecast results set forth in such projections or forecasts and such differences may be material, and (z) are not a guarantee of performance.

5.8 Tax Matters. Except as described on Schedule 5.8, (a) Borrower and its Subsidiaries have filed all federal and state income Tax returns and other material Tax returns that they are required to file, (b) Borrower and its Subsidiaries have duly paid all federal and state income Taxes and other material Taxes or installments thereof that they are required to pay, except Taxes being contested in good faith by appropriate proceedings and for which Borrower and its Subsidiaries maintain adequate reserves in accordance with GAAP, and (c) to the best of Borrower's knowledge, no proposed or pending Tax assessments, deficiencies, audits or other proceedings with respect to Borrower or any Subsidiary have had, or would reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

5.9 Current Company IP Claims. Borrower is the sole owner of, or otherwise has the right to use, the Current Company IP material to Borrower's business. Except as described on Schedule 5.9, (i) to the knowledge of any Borrower, each of the material Copyrights, Trademarks and Patents is valid and enforceable, (ii) no material part of the Current Company IP has been judged invalid or unenforceable, in whole or in part, and (iii) no claim has been made to Borrower that any material part of the Current Company IP violates the rights of any third party. Section 5 of the Perfection Certificate contains a true, correct and complete list of each of Borrower's Patents, registered Trademarks, registered Copyrights, and material agreements under which Borrower licenses Current Company IP from third parties (other than shrink-wrap software licenses), together with application or registration numbers, as applicable, owned by Borrower or any Subsidiary, in each case as of the Closing Date. Borrower is not in material breach of, nor has Borrower failed to perform any material obligations under, any of the foregoing contracts, licenses or agreements and, to Borrower's knowledge, no third party to any such contract, license or agreement is in material breach thereof or has failed to perform any material obligations thereunder.

5.10 Current Company IP.

(a) A true, correct and complete list of each pending, registered or in-licensed Intellectual Property that, individually or taken together with any other such Intellectual Property, is material to the business of Borrower and its Subsidiaries, taken as a whole, relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Products, and is owned or co-owned by or exclusively or non-exclusively licensed to Borrower or any of its Subsidiaries (collectively, the "Current Company IP"), including its name/title, current owner or co-owners (including ownership interest), registration, patent or application number, and registration or application date, issued or filed in the United States of America, is set forth on Schedule 5.10(a). Except as set forth on Schedule 5.10(a), (i) (A) to the knowledge of any Borrower, each item of owned Current Company IP is valid, subsisting and (other than with respect to Patent applications) enforceable and no such item of Current Company IP has lapsed, expired, been cancelled or invalidated or become abandoned or unenforceable, and (B) no written notice has been received challenging the inventorship or ownership, or relating to any lapse, expiration, invalidation, abandonment or unenforceability, of any such item of Current Company IP, and (ii) (A) each such item of Current Company IP which is licensed from another Person is valid, subsisting and enforceable and no such item of Current Company IP has lapsed, expired, been canceled or invalidated, or become abandoned or unenforceable, and (B) no written notice has been received challenging the inventorship or ownership, or relating to any lapse, expiration, invalidation, abandonment or unenforceability, of any such item of Current Company IP. To the knowledge of any Borrower, there are no published Patents, Patent applications, articles or prior art references (other than prior art cited in any of Borrower's patent prosecution) that would reasonably be expected to materially adversely affect the exploitation of the Products. Except as set forth on Schedule 5.10(a), (x) each Person who has or has had any rights in or to owned Current Company IP or any trade secrets owned by Borrower or any of its Subsidiaries, including each inventor named on the Patents within such owned Current Company IP filed by Borrower or any of its Subsidiaries, has executed an agreement assigning his, her or its entire right, title and interest in and to such owned Current Company IP and such trade secrets, and the inventions, improvements, discoveries, writings, works of authorship, information and other intellectual property embodied, described or claimed therein, to the stated owner thereof, and (y) no such Person has any contractual or other obligation that would preclude or conflict with such assignment or the exploitation of the Products or entitle such Person to ongoing payments.

(b) (i) Borrower or any of its Subsidiaries possesses valid title to the Current Company IP for which it is listed as the owner or co-owner, as applicable, on Schedule 5.10(a); and (ii) there are no Liens on any Current Company IP.

(c) There are no maintenance, annuity or renewal fees that are currently overdue beyond their allotted grace period for any of the Current Company IP which is owned or exclusively licensed to Borrower or any of its Subsidiaries, nor have any applications or registrations therefore lapsed or become abandoned, been cancelled or expired. There are no maintenance, annuity or renewal fees that are currently overdue beyond their allotted grace period for any of the Current Company IP which is non-

exclusively licensed to Borrower or any of its Subsidiaries, nor have any applications or registrations therefor lapsed or become abandoned, been cancelled or expired.

(d) There are no unpaid fees or royalties under any material agreements that have become due, or are expected to become overdue. Each material agreement is in full force and effect and is legal, valid, binding and enforceable in accordance with its respective terms, except as may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or limiting creditors' rights generally or by equitable principles relating to enforceability. Neither Borrower nor any of its Subsidiaries, as applicable, is in breach of or default in any manner that could reasonably be expected to materially affect the Products under any material agreement to which it is a party or may otherwise be bound, and no circumstances or grounds exists that would give rise to a claim of breach or right of rescission, termination, non-renewal, revision or amendment of any of the material agreements, including the execution, delivery and performance of this Agreement and the other Loan Documents.

(e) No payments by Borrower or any of its Subsidiaries are due to any other Person in respect of the Current Company IP, other than pursuant to the material agreements and those fees payable to patent offices in connection with the prosecution and maintenance of the Current Company IP, any applicable taxes and associated attorney fees.

(f) Neither Borrower nor any of its Subsidiaries has undertaken or omitted to undertake any acts, and to no circumstance or grounds exist, that would invalidate or render unenforceable (i) any Current Company IP in any manner that could reasonably be expected to materially adversely affect the Products, or (ii) in the case of Current Company IP owned or co-owned or exclusively or non-exclusively licensed by Borrower or any of its Subsidiaries, in each case except as set forth on Schedule 5.10(f), Borrower's or Subsidiary's entitlement to own or license and exploit such Current Company IP.

(g) Except as described on Schedule 5.9(g) or in the most recently delivered Compliance Certificate in accordance with Section 7.1(d), there is no requested, filed pending, decided or settled opposition, interference proceeding, reissue proceeding, reexamination proceeding, inter-partes review proceeding, post-grant review proceeding, cancellation proceeding, injunction, litigation, paragraph IV patent certification or lawsuit under the Hatch-Waxman Act, hearing, investigation, complaint, arbitration, mediation, demand, International Trade Commission investigation, decree or any other dispute, disagreement, or claim, in each case alleged in writing to Borrower or any of its Subsidiaries (collectively referred to hereinafter as "Specified Disputes"), nor to the knowledge of any Borrower, has any such Specified Dispute been threatened in writing, in each case challenging the legality, validity, enforceability or ownership of any Current Company IP, in each case that would have a material adverse effect on the Products.

(h) In each case where an issued Patent within the Current Company IP is owned or co-owned by Borrower or any of its Subsidiaries by assignment, the assignment has been duly recorded with the U.S. Patent and Trademark Office.

(i) Except as set forth on Schedule 5.10(i) there are no pending or, to the knowledge of any Borrower, threatened claims against Borrower or any of its Subsidiaries alleging (i) that any research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Products in the United States of America infringes or violates (or in the past infringed or violated) the rights of any third parties in or to any Intellectual Property ("Third Party IP") or constitutes a misappropriation of (or in the past constituted a misappropriation of) any Third Party IP, or (ii) that any Current Company IP is invalid or unenforceable.

(j) Except as set forth on Schedule 5.10(j), the manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Products does not, to the knowledge of any Borrower, infringe or violate (or in the past infringed or violated) any issued or registered Third Party IP (including any issued Patent within the Third Party IP) or constitute a misappropriation of (or in the past constituted a misappropriation of) any Third Party IP, in each case, in a manner that would reasonably be expected to materially adversely affect the exploitation of the Products.

(k) Except as set forth on Schedule 5.10(k), there are no settlements, covenants not to sue, consents, judgments, orders or similar obligations which: (i) restrict the rights of the Borrower or any of its Subsidiaries to use any Intellectual Property relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Products (in order to accommodate any Third Party IP or otherwise), or (ii) permit any third parties to use any Current Company IP.

(l) Except as set forth on Schedule 5.10(l), to the knowledge of any Borrower (i) there is no, nor has there been any, infringement or violation by any Person of any of the Current Company IP or the rights therein, and (ii) there is no, nor has there been any, misappropriation by any Person of any Current Company IP or the subject matter thereof.

(m) Borrower and each of its Subsidiaries has taken commercially reasonable measures customary in the biopharmaceutical industry to protect the confidentiality of all trade secrets owned by Borrower or any of its Subsidiaries or used or held for use by Borrower or any of its Subsidiaries, in each case relating to the research, development, manufacture, production, use, commercialization, marketing, importing, storage, transport, offer for sale, distribution or sale of the Products.

(n) [reserved].

(o) Except as described on Schedule 5.10(o), Borrower has all material rights with respect to Intellectual Property necessary or other than would not be expected to cause a Material Adverse Effect, with respect to Current Company IP material in the operation or conduct of Borrower's business as currently conducted and proposed to be conducted by Borrower. Without limiting the generality of the foregoing, and in the case of Licenses, except for restrictions that are unenforceable under Article 9 of the UCC,

Borrower has the right, to the extent required to operate Borrower's business, to freely transfer, license or assign Current Company IP material in the operation or conduct of Borrower's business as currently conducted and proposed to be conducted by Borrower, without condition, restriction or payment of any kind (other than license payments in the ordinary course of business) to any third party, and Borrower owns or has the right to use, pursuant to valid licenses, all software development tools, library functions, compilers and all other third-party software and other items that are material to Borrower's business and used in the design, development, promotion, sale, license, manufacture, import, export, use or distribution of Borrower Products except customary covenants in inbound license agreements and equipment leases where Borrower is the licensee or lessee.

(p) No material software or other materials used by Borrower or any of its Subsidiaries (or used in any Borrower Products or any Subsidiaries' products) are subject to an open-source or similar license (including but not limited to the General Public License, Lesser General Public License, Mozilla Public License, or Affero License) (collectively, "Open Source Licenses") in a manner that would cause such software or other materials to have to be (i) distributed to third parties at no charge or a minimal charge (royalty-free basis); (ii) licensed to third parties to modify, make derivative works based on, decompile, disassemble, or reverse engineer; or (iii) used in a manner that does could require disclosure or distribution in source code form.

5.11 Borrower Products. Except as described on Schedule 5.11, no Current Company IP owned by Borrower and material in its business or Borrower Product has been or is subject to any actual or, to the knowledge of Borrower, threatened in writing, litigation, proceeding (including any proceeding in the United States Patent and Trademark Office or any corresponding foreign office or agency) or outstanding decree, order, judgment, settlement agreement or stipulation that restricts in any manner Borrower's use, transfer or licensing thereof or that may affect the validity, use or enforceability thereof. There is no decree, order, judgment, agreement, stipulation, arbitral award or other provision entered into in connection with any litigation or proceeding that obligates Borrower to grant licenses or ownership interest in any future Intellectual Property related to the operation or conduct of the business of Borrower or Borrower Products. Borrower has not received any written notice or claim challenging or questioning Borrower's ownership in any Current Company IP (or written notice of any claim challenging or questioning the ownership in any licensed Current Company IP of the owner thereof) or suggesting that any third party has any claim of legal or beneficial ownership with respect thereto nor, to Borrower's knowledge, is there a reasonable basis for any such claim.

5.12 Financial Accounts. Exhibit D, as may be updated by Borrower in a written notice provided to Agent after the Closing Date, is a true, correct and complete list of (a) all banks and other financial institutions at which Borrower or any Subsidiary maintains Deposit Accounts and (b) all institutions at which Borrower or any Subsidiary maintains an account holding Investment Property, and such exhibit correctly identifies the name, address and telephone number of each bank or other institution, the name in which the account is held, a description of the purpose of the account, and the complete account number therefor.

5.13 Employee Loans. Borrower has no outstanding loans to any employee, officer or director of Borrower nor has Borrower guaranteed the payment of any loan made to an employee, officer or director of Borrower by a third party except as permitted hereunder.

5.14 Capitalization and Subsidiaries. Borrower's capitalization (other than Parent) as of the Closing Date is set forth on Schedule 5.14 annexed hereto. Borrower does not own any stock, partnership interest or other securities of any Person, except for Permitted Investments. Attached as Schedule 5.14, as may be updated by Borrower in a written notice provided after the Closing Date, is a true, correct and complete list of each Subsidiary.

5.15 Centre of Main Interests and Establishments. For the purposes of The Council of the European Union Regulation No. 2015/848 of 20 May 2015 on insolvency proceedings (recast) on Insolvency Proceedings (the "Regulation"), Replimune UK's centre of main interest (as that term is used in Article 3(1) of the Regulation) is situated in England and Wales and it has no "establishment" (as that term is used in Article 2(10) of the Regulation) in any other jurisdiction.

5.16 Solvency. (i) The fair saleable value of Borrower's consolidated assets exceeds the fair value of Borrower's liabilities; (ii) Borrower is not left with unreasonably small capital after the transactions in the Loan Documents; and (iii) Borrower is able to pay its debts (including trade debts) as they become due.

SECTION 6 INSURANCE; INDEMNIFICATION

6.1 Coverage. Borrower shall cause to be carried and maintained commercial general liability insurance, on an occurrence form, against risks customarily insured against in Borrower's line of business. Such risks shall include the risks of bodily injury, including death, property damage, personal injury, and contractual liability per the terms of the indemnification agreement found in Section 6.3. Borrower must maintain a minimum of $2,000,000 of commercial general liability insurance for each occurrence. Borrower has and agrees to maintain a minimum of $2,000,000 of directors' and officers' insurance for each occurrence and $5,000,000 in the aggregate. So long as there are any Secured Obligations outstanding, Borrower shall also cause to be carried and maintained insurance upon the Collateral, insuring against all risks of physical loss or damage howsoever caused, in an amount not less than the full replacement cost of the Collateral, provided that such insurance may be subject to standard exceptions and deductibles.

6.2 Certificates. Borrower shall deliver to Agent certificates of insurance that evidence Borrower's compliance with its insurance obligations in Section 6.1 and the obligations contained in this Section 6.2. Borrower's insurance certificate shall state Agent (shown as "Hercules Capital, Inc., as Agent") is an additional insured for commercial general liability, a lenders loss payable for all risk property damage insurance, subject to the insurer's approval, and a lenders loss payable for property insurance and additional insured for liability insurance for any future insurance that Borrower may acquire from such insurer. Attached to the certificates of insurance will be additional insured endorsements for liability and lender's loss payable endorsements for all risk property damage insurance. All certificates of insurance will provide for a minimum of thirty (30) days advance written notice to Agent of cancellation (other than

cancellation for non-payment of premiums, for which ten (10) days' advance written notice shall be sufficient) or any other change adverse to Agent's interests. Any failure of Agent to scrutinize such insurance certificates for compliance is not a waiver of any of Agent's rights, all of which are reserved. At Agent's written request, Borrower shall provide Agent with copies of each insurance policy, and upon entering or amending any insurance policy required hereunder in any material respect, Borrower shall provide Agent with copies of such policies and shall promptly deliver to Agent updated insurance certificates with respect to such policies.

6.3 Indemnity. Borrower agrees to indemnify and hold Agent, the Lenders and their officers, directors, employees, agents, in-house attorneys, representatives and shareholders (each, an "Indemnified Person") harmless from and against any and all claims, costs, expenses, damages and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort), including reasonable and documented attorneys' fees and out-of-pocket disbursements and other costs of investigation or defense (including those incurred upon any appeal) (collectively, "Liabilities"), that may be instituted or asserted against or incurred by such Indemnified Person as the result of credit having been extended, suspended or terminated under this Agreement and the other Loan Documents or the administration of such credit, or in connection with or arising out of the transactions contemplated hereunder and thereunder, or any actions or failures to act in connection therewith, or arising out of the disposition or utilization of the Collateral, excluding in all cases Liabilities to the extent resulting solely from any Indemnified Person's gross negligence, willful misconduct or breach in bad faith of its obligations hereunder. This Section 6.3 shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim. In no event shall any Indemnified Person be liable on any theory of liability for any special, indirect, consequential or punitive damages (including any loss of profits, business or anticipated savings). This Section 6.3 shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, the Loan Agreement.

SECTION 7 COVENANTS OF BORROWER

Borrower agrees as follows:

7.1 Financial Reports. Borrower shall furnish to Agent the financial statements and reports listed hereinafter (the "Financial Statements"):

(a) as soon as practicable (and in any event within 30 days) after the end of each month, unaudited interim and year-to-date financial statements as of the end of such month (prepared on a consolidated and consolidating basis, if applicable), including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against Borrower) or any other occurrence that would reasonably be expected to have a Material Adverse Effect, all certified by Parent's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, except (i) for the absence of footnotes, (ii) that they are subject to normal year end adjustments, and (iii) they do not contain certain non-cash items that are customarily included in quarterly and annual financial statements;

(b) as soon as practicable (and in any event within 45 days) after the end of each calendar quarter, unaudited interim and year-to-date financial statements as of the end of such calendar quarter (prepared on a consolidated and consolidating basis, if applicable), including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies (including the commencement of any material litigation by or against Borrower) or any other occurrence that would reasonably be expected to have a Material Adverse Effect, certified by Parent's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, except (i) for the absence of footnotes, and (ii) that they are subject to normal year end adjustments;

(c) as soon as practicable (and in any event within ninety (90) days) after the end of each fiscal year, audited financial statements as of the end of such year (prepared on a consolidated and consolidating basis, if applicable), including balance sheet and related statements of income and cash flows, and setting forth in comparative form the corresponding figures for the preceding fiscal year, certified without qualification (other than any going concern qualification) by a firm of independent certified public accountants selected by Parent and reasonably acceptable to Agent (it being understood that PricewaterhouseCoopers is reasonably acceptable to Agent), accompanied by any final management report from such accountants;

(d) as soon as practicable (and in any event within 30 days) after the end of each month, a Compliance Certificate in the form of Exhibit E;

(e) as soon as practicable (and in any event within 7 days) after the end of each month, a report showing agings of accounts receivable and accounts payable;

(f) promptly after the sending or filing thereof, as the case may be, copies of any proxy statements, financial statements or reports that Borrower has made available to holders of its preferred stock and copies of any regular, periodic and special reports or registration statements that Borrower files with the Securities and Exchange Commission or any governmental authority that may be substituted therefor, or any national securities exchange;

(g) promptly after the delivery thereof to its directors, copies of all notices, minutes, consents and other materials that Borrower provides to its directors in connection with meetings of the Board of Directors, provided that in all cases Borrower may exclude (x) confidential compensation information, (y) information that is subject to attorney/client privilege, and (z) materials that are reasonably related to Borrower's strategy, negotiating position or other matters materially relating to this Agreement or any other Loan Documents or any permitted refinancings thereof;

(h) financial and business projections promptly following their approval by Parent's Board of Directors, and in any event, within 90 days after the end of Parent's fiscal year, as well as budgets, operating plans and other financial information reasonably requested by Agent; and

(i) immediate notice if Borrower or any Subsidiary has knowledge that Borrower, or any Subsidiary or Affiliate of Borrower, is listed on the OFAC Lists or (a) is convicted on, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering.

Borrower shall not make any change in its (a) accounting policies or reporting practices (other than changes required by GAAP), or (b) fiscal years or fiscal quarters. The fiscal year of Borrower shall end on March 31.

The executed Compliance Certificate may be sent via email to Agent at legal@htgc.com. Except as specified below, all Financial Statements required to be delivered pursuant to clauses (a), (b) and (c) shall be sent via e-mail to financialstatements@htgc.com with a copy to legal@htgc.com, bjadot@htgc.com, jralto@htgc.com and mdutra@htgc.com, provided, that if e-mail is not available or sending such Financial Statements via e-mail is not possible, they shall be faxed to Agent at: (650) 473-9194, attention Account Manager: Replimune Group, Inc.

Notwithstanding the foregoing, documents required to be delivered under Sections 7.1(a), (b), (c) or (f) (to the extent any such documents are included in materials otherwise filed with the SEC) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date on which Borrower makes such documents publicly available.

7.2 Management Rights. Borrower shall permit any representative that Agent or the Lenders authorizes, including its attorneys and accountants, to inspect the Collateral and examine and make copies and abstracts of the books of account and records of Borrower at reasonable times and upon reasonable notice during normal business hours; provided, however, that so long as no Event of Default has occurred and is continuing, such examinations shall be limited to no more often than once per fiscal year. In addition, any such representative shall have the right to meet with management and officers of Borrower to discuss such books of account and records. In addition, Agent or the Lenders shall be entitled at reasonable times and intervals to consult with and advise the management and officers of Borrower concerning significant business issues affecting Borrower. Such consultations shall not unreasonably interfere with Borrower's business operations. The parties intend that the rights granted Agent and the Lenders shall constitute "management rights" within the meaning of 29 C.F.R. Section 2510.3-101(d)(3)(ii), but that any advice, recommendations or participation by Agent or the Lenders with respect to any business issues shall not be deemed to give Agent or the Lenders, nor be deemed an exercise by Agent or the Lenders of, control over Borrower's management or policies.

7.3 Further Assurances. Borrower shall from time to time execute, deliver and file, alone or with Agent, any financing statements, security agreements, collateral assignments, notices, control agreements, promissory notes or other documents to perfect, give the highest priority to Agent's Lien on the Collateral or otherwise evidence Agent's rights herein. Borrower shall from time to time procure any instruments or documents as may be reasonably requested by Agent, and take all further action that may be necessary, or that Agent may reasonably request, to perfect and protect the Liens granted hereby and thereby. In addition, and for such purposes only, Borrower hereby authorizes Agent to execute and deliver on behalf of Borrower and to file such financing statements (including an indication that the financing statement covers "all assets

or all personal property" of Borrower in accordance with Section 9-504 of the UCC), collateral assignments, notices, control agreements, security agreements and other documents without the signature of Borrower either in Agent's name or in the name of Agent as agent and attorney-in-fact for Borrower. Borrower shall protect and defend Borrower's title to the Collateral and Agent's Lien thereon against all Persons claiming any interest adverse to Borrower or Agent other than Permitted Liens.

7.4 Indebtedness. Borrower shall not create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, or permit any Subsidiary so to do, other than Permitted Indebtedness, or prepay any Indebtedness or take any actions which impose on Borrower an obligation to prepay any Indebtedness, except for (a) the conversion of Indebtedness into equity securities and the payment of cash in lieu of fractional shares in connection with such conversion, (b) purchase money Indebtedness or Indebtedness in respect of capital leases permitted hereunder pursuant to its then applicable payment schedule, (c) prepayment by any Subsidiary of (i) inter-company Indebtedness owed by such Subsidiary to any Borrower, or (ii) if such Subsidiary is not a Borrower, intercompany Indebtedness owed by such Subsidiary to another Subsidiary that is not a Borrower or (d) as otherwise permitted hereunder or approved in writing by Agent.

Notwithstanding anything to the contrary in the foregoing, the issuance of, performance of obligations under (including any payments of interest), and conversion, exchange, exercise, repurchase, redemption (including, for the avoidance of doubt, a required repurchase in connection with the redemption of Permitted Convertible Debt upon satisfaction of a condition related to the stock price of the Common Stock), settlement or early termination or cancellation of (whether in whole or in part and including by netting or set-off) (in each case, whether in cash, Common Stock, following a merger event or other change of the Common Stock, other securities or property), or the satisfaction of any condition that would permit or require any of the foregoing, any Permitted Convertible Debt shall not constitute a prepayment of Indebtedness by Borrower for the purposes of this Section 7.4; provided that principal payments in cash (other than cash in lieu of fractional shares) shall only be allowed if the Redemption Conditions are satisfied in respect of such payment and at all times after such payment.

7.5 Collateral. Borrower shall at all times keep the Collateral and the Company IP and all other property and assets used in Borrower's business or in which Borrower now or hereafter holds any interest free and clear from any Liens whatsoever (other than Permitted Liens), and shall give Agent prompt written notice of (a) any legal process affecting the Collateral, the Company IP or such other property and assets in an aggregate amount greater than $1,000,000 at any time, or (b) any Liens thereon (other than Permitted Liens), provided however, that the Collateral and such other property and assets may be subject to Permitted Liens except that there shall be no Liens whatsoever (other than Permitted Liens that are do not arise by agreement, such as tax or statutory Liens) on Company IP. Borrower shall not enter into or suffer to exist or become effective any agreement that prohibits or limits the ability of any Borrower to create, incur, assume or suffer to exist any Lien upon any of its property (including Company IP), whether now owned or hereafter acquired, to secure its obligations under the Loan Documents to which it is a party other than (a) this Agreement and the other Loan Documents, (b) any agreements governing any purchase money Liens or capital lease obligations otherwise

permitted hereby (in which case, any prohibition or limitation shall only be effective against the assets financed thereby) and (c) customary restrictions on the assignment of leases, licenses and other agreements. Borrower shall cause its Subsidiaries to protect and defend such Subsidiary's title to its assets from and against all Persons claiming any interest adverse to such Subsidiary (other than Permitted Liens), and Borrower shall cause its Subsidiaries at all times to keep such Subsidiary's property and assets free and clear from any legal process or Liens whatsoever (except for Permitted Liens, provided however, that there shall be no Liens whatsoever (other than Permitted Liens that are do not arise by agreement, such as tax or statutory Liens) on Company IP), and shall give Agent prompt written notice of any legal process affecting such Subsidiary's assets in an aggregate amount greater than $1,000,000 at any time.

7.6 Investments. Borrower shall not directly or indirectly acquire or own, or make any Investment in or to any Person, or permit any of its Subsidiaries so to do, other than Permitted Investments.

Notwithstanding the foregoing, and for the avoidance of doubt, this Section 7.6 shall not prohibit the conversion by holders of (including any payment upon conversion, whether in cash, Common Stock or a combination thereof), or required payment of any principal or premium on (including, for the avoidance of doubt, in respect of a required repurchase in connection with the redemption of Permitted Convertible Debt upon satisfaction of a condition related to the stock price of the Common Stock) or required payment of any interest with respect to, any Permitted Convertible Debt in each case, in accordance with the terms of the indenture governing such Permitted Convertible Debt; provided that principal payments in cash (other than cash in lieu of fractional shares) shall only be allowed if the Redemption Conditions are satisfied in respect of such payment and at all times after such payment.

7.7 Distributions. Borrower shall not, and shall not allow any Subsidiary to, (a) repurchase or redeem any class of stock or other Equity Interest other than pursuant to employee, director or consultant repurchase plans or other similar agreements, provided, however, in each case the repurchase or redemption price does not exceed the fair market value for such stock or Equity Interest, or (b) declare or pay any cash dividend or make any other cash distribution on any class of stock or other Equity Interest, except that a Subsidiary may pay dividends or make other distributions to Borrower or any Subsidiary of Borrower, (c) lend money to any employees, officers or directors or guarantee the payment of any such loans granted by a third party in excess of $200,000 in the aggregate at any time outstanding or (d) waive, release or forgive any Indebtedness owed by any employees, officers or directors in excess of $200,000 in the aggregate.

Notwithstanding the foregoing, and for the avoidance of doubt, this Section 7.7 shall not prohibit the conversion by holders of (including any payment upon conversion, whether in cash, Common Stock or a combination thereof), or required payment of any principal or premium on or required payment of any interest with respect to, any Permitted Convertible Debt in each case, in accordance with the terms of the indenture governing such Permitted Convertible Debt; provided that principal payments in cash (other than cash in lieu of fractional shares) shall only be allowed if the Redemption Conditions are satisfied in respect of such payment and at all times after such payment.

7.8 Transfers. Except for Permitted Transfers, Borrower shall not, and shall not allow any Subsidiary to, voluntarily or involuntarily transfer, sell, lease, license, lend or in any other manner convey any equitable, beneficial or legal interest in any material portion of its assets; provided that licenses of Company IP (to the extent not constituting Permitted Transfers) may be made with the consent of the Required Lenders, it being understood that the Required Lenders' response in respect of such consent shall not be unreasonably withheld or delayed.

7.9 Mergers or Acquisitions. Borrower shall not merge or consolidate, or permit any of its Subsidiaries to merge or consolidate, with or into any other business organization (other than mergers or consolidations of (a) a Subsidiary which is not a Borrower into another Subsidiary or into Borrower or (b) a Borrower into another Borrower), or, other than Permitted Acquisitions, acquire, or permit any of its Subsidiaries to acquire, in each case including for the avoidance of doubt through a merger, purchase, in-licensing arrangement or any similar transaction, all or substantially all of the capital stock or any property of another Person.

7.10 Taxes. Borrower shall, and shall cause each of its Subsidiaries to, pay when due all material Taxes of any nature whatsoever now or hereafter imposed or assessed against Borrower or the Collateral or upon Borrower's ownership, possession, use, operation or disposition thereof or upon Borrower's rents, receipts or earnings arising therefrom. Borrower shall, and shall cause each of its Subsidiaries to, accurately file on or before the due date therefor (taking into account proper extensions) all federal and state income Tax returns and other material Tax returns required to be filed. Notwithstanding the foregoing, Borrower and its Subsidiaries may contest, in good faith and by appropriate proceedings diligently conducted, Taxes for which Borrower and its Subsidiaries maintain adequate reserves in accordance with GAAP.

7.11 Corporate Changes. Neither Borrower nor any Subsidiary shall change its corporate name, legal form or jurisdiction of formation without twenty (20) days' prior written notice to Agent. Neither Borrower nor any Subsidiary shall suffer a Change in Control. Neither Borrower nor any Subsidiary shall relocate its chief executive office or its principal place of business unless: (i) it has provided prior written notice to Agent; and (ii) other than with respect to Replimune UK, such relocation shall be within the continental United States of America. Neither Borrower nor any Subsidiary shall relocate any item of Collateral (other than (x) sales of Inventory in the ordinary course of business, (y) relocations of Equipment having an aggregate value of up to $150,000 in any fiscal year, and (z) relocations of Collateral from a location identified in Section 4(d) and Section 4(e) of the Perfection Certificate (as in effect on the date hereof) to another location identified in Section 4(d) and Section 4(e) of the Perfection Certificate (as in effect on the date hereof)) unless (1) it has provided prompt written notice to Agent, (2) other than with respect to Replimune UK, such relocation is within the continental United States of America or, with respect to Replimune UK, such relocation is within the United Kingdom, and (3) if such relocation is to a third party bailee, it has delivered a bailee agreement (to the extent customary under applicable law) in form and substance reasonably acceptable to Agent, excluding: (A) the leased premises located at 69 Innovation Drive, Milton Park, Abingdon, Oxfordshire, United Kingdom, OX14 4RQ and (B) the locations identified in Section 4(e) of the Perfection Certificate (as in effect on the date hereof), but such exclusion shall only be effective if such locations are solely used in connection with clinical trials or the Collateral located at such locations are comprised solely of drug products.

7.12 Deposit Accounts. Neither Borrower nor any Subsidiary (other than Excluded Subsidiaries and the MSC Subsidiary) shall maintain any Deposit Accounts, or accounts holding Investment Property, except with respect to which Agent has an Account Control Agreement, in each case other than Excluded Accounts. Borrower shall not permit any Excluded Subsidiary to hold cash or cash equivalents in an aggregate amount greater than $1,000,000 for any single Excluded Subsidiary and $1,500,000 for all Excluded Subsidiaries.

7.13 New Subsidiaries. Borrower shall notify Agent of each Subsidiary formed subsequent to the Closing Date and, within 30 days of formation, shall cause any such Subsidiary (other than an Excluded Subsidiary) to execute and deliver to Agent a Joinder Agreement. In the event one or more Subsidiaries that were previously Excluded Subsidiaries no longer qualify as an Excluded Subsidiary, such Subsidiaries shall be subject to the requirements of the immediately preceding sentence.

7.14 MSC Investments. At any time that (a) the MSC Subsidiary has any assets or liabilities and (b) the aggregate amount of the consolidated Cash of Borrower and its Subsidiaries is equal to or less than One Hundred Fifty Million Dollars ($150,000,000), then Borrower shall satisfy the MSC Investment Conditions at any such time.

7.15 Notification of Event of Default. Borrower shall notify Agent immediately of the occurrence of any Event of Default.

7.16 Use of Proceeds. Borrower agrees that the proceeds of the Loans shall be used solely to pay related fees and expenses in connection with this Agreement and for working capital and general corporate purposes. The proceeds of the Loans will not be used in violation of Anti-Corruption Laws or applicable Sanctions.

7.17 Compliance with Laws.

(a) Borrower (i) shall maintain, and shall cause its Subsidiaries to maintain, compliance in all material respects with all applicable laws, rules or regulations (including any law, rule or regulation with respect to the making or brokering of loans or financial accommodations), and (ii) shall, or cause its Subsidiaries to, obtain and maintain all required governmental authorizations, approvals, licenses, franchises, permits or registrations reasonably necessary in connection with the conduct of Borrower's business. Borrower shall not become an "investment company" or a company controlled by an "investment company", under the Investment Company Act of 1940, as amended, or undertake as one of its important activities extending credit to purchase or carry margin stock (as defined in Regulation X, T and U of the Federal Reserve Board of Governors).

(b) Neither Borrower nor any of its Subsidiaries shall, nor shall Borrower or any of its Subsidiaries permit, to its knowledge, any Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. Neither Borrower nor any Subsidiary shall, nor shall Borrower or any of its Subsidiaries permit, to its knowledge, any Affiliate to, directly or indirectly, (i) conduct any business or engage in any transaction or dealing with any

Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law.

(c) Borrower has implemented and maintains in effect policies and procedures designed to ensure compliance by Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions, and Borrower, its Subsidiaries and their respective officers and employees and to the knowledge of Borrower its directors and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects.

(d) None of Borrower, any of its Subsidiaries or any of their respective directors, officers or employees, or to the knowledge of Borrower, any agent for Borrower or its Subsidiaries that will act in any capacity in connection with or benefit from the credit facility established hereby, is a Sanctioned Person. No Loan, use of proceeds or other transaction contemplated by this Agreement will violate Anti-Corruption Laws or applicable Sanctions.

7.18 Company IP. Each Borrower shall (i) protect, defend and maintain the validity and enforceability of its Company IP that is material to its business; (ii) promptly advise Agent in writing of material infringements of its Company IP that is material to its business; and (iii) not allow any Company IP material to Borrower's business to be abandoned, forfeited or dedicated to the public without Agent's written consent, provided that Borrower is not required to advise Agent or obtain Agent's consent (written or otherwise) to allow to abandon, forfeit or dedicate to the public Current Company IP as determined in the good faith business judgment of the Borrower.

7.19 Transactions with Affiliates. Borrower shall not and shall not permit any Subsidiary to, directly or indirectly, enter into or permit to exist any transaction of any kind with any Affiliate of Borrower or such Subsidiary (other than transactions among Borrowers permitted under this Agreement) on terms that are less favorable to Borrower or such Subsidiary, as the case may be, than those that might be obtained in an arm's length transaction from a Person who is not an Affiliate of Borrower or such Subsidiary.

7.20 COMI. No Borrower or a Subsidiary of a Borrower, in each case whose jurisdiction of incorporation or organization is in a member state of the European Union shall change its "centre of main interests" (as that term is used in Article 3(1) of the Regulation).

7.21 People with Significant Control Regime. Each Borrower shall (and the Parent shall ensure that each of its Subsidiaries will): (a) within the relevant timeframe, comply with any notice it receives pursuant to Part 21A of the Companies Act 2006 from any UK PSC Loan Party; and (b) promptly provide Agent with a copy of that notice.

7.22 Financial Covenants.

(a) Minimum Cash.

(i) Beginning on January 1, 2024, Borrower shall at all times maintain Unrestricted Cash in an amount not less than 35% of the aggregate outstanding Secured Obligations (inclusive of any Prepayment Charge and End of Term Charge that would be due and owing if the outstanding Term Loan Advances were prepaid at the time of measurement) plus the Qualified Cash A/P Amount; provided that, upon (i) achievement of the Approval Milestone and (ii) the effectiveness of the Performance Covenant, Borrower shall at all times maintain Unrestricted Cash in an amount not less than 20% of the aggregate outstanding Secured Obligations (inclusive of any Prepayment Charge and End of Term Charge that would be due and owing if the outstanding Term Loan Advances were prepaid at the time of measurement) plus the Qualified Cash A/P Amount; provided, further, that the outstanding Term Loan Advances shall include, for the avoidance of doubt, any principal that has been added to the principal balance of such Term Loan Advances pursuant to Section 2.2(h)(ii)).

(ii) If Borrower makes any cash payment in respect of the principal of Permitted Convertible Debt, subject to satisfaction of the Redemption Conditions, Borrower shall, at all times thereafter, maintain Unrestricted Cash in the amount required by the defined term "Redemption Conditions".

(b) Conditional Performance Covenant. Beginning on the Performance Covenant Trigger Date, tested on a monthly basis from and after such date, Borrower shall be required to comply with at least one of the following requirements (it being understood and agreed that Borrower shall be permitted to switch on a month to month basis from one such requirement to another, such that compliance with one such requirement in one month will not preclude Borrower from complying with another such requirement in a subsequent month):

(i) as of the last date of each month, Borrower's T3M Net Product Revenue shall be no less than 60% of the projected T3M Net Product Revenue for the trailing three-month period most recently then ended as set forth in the Forecast, provided that for the avoidance of doubt, projected T3M Net Product Revenue shall not be $0;

(ii) at all times during the maintenance period beginning on the first day of such month through and including the date on which Borrower has delivered the financial statements in accordance with Section 7.1(a) and the Compliance Certificate for such month in accordance with Section 7.1(d) to Agent, Borrower shall maintain (A) a Market Capitalization of at least $1,200,000,000 and (B) Unrestricted Cash in an amount not less than 50% of the aggregate outstanding Secured Obligations (inclusive of any Prepayment Charge and End of Term Charge that would be due and owing if the outstanding Term

Loan Advances were prepaid at the time of measurement) plus the Qualified Cash A/P Amount; and

(iii) at all times during the maintenance period beginning on the first day of such month through and including the date on which Borrower has delivered the financial statements in accordance with Section 7.1(a) and the Compliance Certificate for such month in accordance with Section 7.1(d) to Agent, Borrower shall maintain Unrestricted Cash in an amount not less than 85% of the aggregate outstanding Secured Obligations (inclusive of any Prepayment Charge and End of Term Charge that would be due and owing if the outstanding Term Loan Advances were prepaid at the time of measurement) plus the Qualified Cash A/P Amount;

provided that the outstanding Term Loan Advances shall include, for the avoidance of doubt, any principal that has been added to the principal balance of such Term Loan Advances pursuant to Section 2.2(h)(ii)).

7.23 [reserved]

7.24 Regulatory and Product Notices. Borrower shall within three (3) Business Days after the receipt or occurrence thereof notify Agent of:

(a) any written notice from a governmental authority received by Borrower or its Subsidiaries alleging potential or actual violations of any Public Health Law by Borrower or its Subsidiaries;

(b) any written notice from a governmental authority that the FDA (or international equivalent) is limiting, suspending or revoking any Registration (including, but not limited to, by the issuance of a clinical hold);

(c) any written notice from a governmental authority that Borrower or its Subsidiaries has become subject to any Regulatory Action;

(d) the exclusion or debarment from any governmental healthcare program or debarment or disqualification by FDA (or international equivalent) of Borrower or its Subsidiaries or its or their authorized officers;

(e) any notice from a governmental authority that Borrower or any Subsidiary, or any of their licensees or sublicensees (including licensees or sublicensees under any material agreement), is being investigated or is the subject of any allegation of potential or actual violations of any Federal Health Care Program Laws;

(f) any written notice from a governmental authority that any product of Borrower or its Subsidiaries has been seized, withdrawn, recalled, detained, or subject to a suspension of manufacturing, or the commencement of any proceedings in the United States of America or any other jurisdiction seeking the seizure, withdrawal, recall, import detention, or suspension of manufacturing, of any Product are pending or threatened in writing against Borrower or its Subsidiaries; or

(g) narrowing or limiting the scope of marketing authorization or the labeling of the Products of Borrower and its Subsidiaries under any such Registration.

except, in each case of (a) through (g) above, where such action would not reasonably be expected to have, either individually or in the aggregate, Material Regulatory Liabilities.

SECTION 8 RIGHT TO INVEST

8.1 Borrower shall give timely prior written notice to Agent of each Subsequent Financing and shall use commercially reasonable efforts to permit the Lenders or their Affiliates, or permitted assignees of the Loans hereunder or nominees of the Lenders or their Affiliates, to participate in any Subsequent Financings in an aggregate amount as the underwriters for such Subsequent Financing may determine (in their sole discretion) and on substantially the same terms, conditions and pricing afforded to others participating in any such Subsequent Financing (subject to compliance with applicable securities laws and regulations). This Section 8.1, and all rights and obligations granted hereunder, shall automatically terminate the earliest to occur of (a) termination of the security interest granted pursuant to Section 3.1 of this Agreement, and (b) Borrower having previously extended two (2) such offers to permit the Lenders or their Affiliates, or permitted assignees of the Loans hereunder or nominees of the Lenders or their Affiliates, to participate in Subsequent Financings.

SECTION 9 EVENTS OF DEFAULT

The occurrence of any one or more of the following events shall be an Event of Default:

9.1 Payments. Borrower fails to pay any amount due under this Agreement or any of the other Loan Documents on the due date; provided, however, that an Event of Default shall not occur on account of a failure to pay) above due solely to an administrative or operational error of Agent or the Lenders or Borrower's bank if Borrower had the funds to make the payment when due and makes the payment within three (3) Business Days following Borrower's knowledge of such failure to pay; or

9.2 Covenants. Borrower breaches or defaults in the performance of any covenant or Secured Obligation under this Agreement, or any of the other Loan Documents or any other agreement among Borrower, Agent and the Lenders, and (a) with respect to a default under any covenant under this Agreement (other than under Sections 4.4, 6, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.12, 7.14, 7.15, 7.16, 7.17, 7.18, 7.19, 7.22 and 7.24), any other Loan Document, or any other agreement among Borrower, Agent and the Lenders, such default continues for more than twenty (20) days after the earlier of the date on which (i) Agent or the Lenders has given notice of such default to Borrower or (ii) Borrower has actual knowledge of such default or (b) with respect to a default under any of Sections 4.4, 6, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.12, 7.14, 7.15, 7.16, 7.17, 7.18, 7.19, 7.22 and 7.24 the occurrence of such default; or

9.3 Material Adverse Effect. A circumstance has occurred that could reasonably be expected to have a Material Adverse Effect; provided that the occurrence of the following, individually, shall not, in and of itself, constitute a "Material Adverse Effect" hereunder: (i) the failure to achieve any Milestone, (ii) adverse results or delays with respect to, or the failure to achieve, any clinical or non-clinical trial goals or objectives, (iii) the denial, delay or limitation

or qualification of approval of the FDA or other regulatory agency with respect to any proposed drug or other Borrower Products, or (iv) any revisions to or termination of a strategic alliance, joint venture, co-promotion, co-commercialization or co-development agreements or license arrangement maintained by Borrower so long as the same does not affect the ability of Borrower to perform or pay the Secured Obligations in accordance with the terms of the Loan Documents; or

9.4 Representations. Any representation or warranty made by Borrower in any Loan Document shall have been false or misleading in any material respect when made or when deemed made; or

9.5 Insolvency. Borrower (a) (i) shall be unable to pay its debts (including trade debts) as they become due, or be unable to pay or perform under the Loan Documents, (ii) shall fail to maintain assets with a fair saleable value that exceeds the fair value of such Borrower's liabilities, (iii) shall maintain an unreasonably small amount of capital with which to conduct its business, or (iv) shall otherwise become insolvent; or (b) (i) shall make an assignment for the benefit of creditors; or (ii) shall file a voluntary petition in bankruptcy, or (iii) shall file any petition, answer, or document seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation pertinent to such circumstances; or (iv) shall seek or consent to or acquiesce in the appointment of any trustee, receiver, or liquidator of Borrower or of all or any substantial part (i.e., 33-1/3% or more) of the assets or property of Borrower; or (v) shall cease operations of its business as its business has normally been conducted, or terminate substantially all of its employees; or (vi) Borrower or its directors or majority shareholders shall take any action initiating any of the foregoing actions described in clauses (i) through (v); or (c) either (i) forty five (45) days shall have expired after the commencement of an involuntary action against Borrower seeking reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, without such action being dismissed or all orders or proceedings thereunder affecting the operations or the business of Borrower being stayed; or (ii) a stay of any such order or proceedings shall thereafter be set aside and the action setting it aside shall not be timely appealed; or (iii) Borrower shall file any answer admitting or not contesting the material allegations of a petition filed against Borrower in any such proceedings; or (iv) the court in which such proceedings are pending shall enter a decree or order granting the relief sought in any such proceedings; or (v) forty five (45) days shall have expired after the appointment, without the consent or acquiescence of Borrower, of any trustee, receiver or liquidator of Borrower or of all or any substantial part of the properties of Borrower without such appointment being vacated; or

9.6 Attachments; Judgments. Any portion of Borrower's assets is attached or seized, or a levy is filed against any such assets, or a judgment or judgments is/are entered for the payment of money (not covered by independent third party insurance as to which liability has not been rejected by such insurance carrier), individually or in the aggregate, of at least $1,000,000, or Borrower is enjoined or in any way prevented by court order from conducting any part of its business; or

9.7 Other Obligations. The occurrence of any default under any agreement or obligation of Borrower involving any Indebtedness in excess of $1,000,000, the effect of which

default is to cause, or to permit the holder or beneficiary of such Indebtedness (or a trustee or agent on behalf of such holder or beneficiary) to cause, with the giving of notice if required, such Indebtedness to become due prior to its stated maturity.

SECTION 10 REMEDIES

10.1 General. Upon the occurrence of any one or more Events of Default that is continuing, Agent may, and at the direction of the Required Lenders shall, accelerate and demand payment of all or any part of the Secured Obligations together with the applicable Prepayment Charge and declare them to be immediately due and payable (provided, that upon the occurrence of an Event of Default of the type described in Section 9.5 that is continuing, all of the Secured Obligations (including, without limitation, the Prepayment Charge and the End of Term Charge) shall automatically be accelerated and made due and payable, in each case without any further notice or act). Borrower hereby irrevocably appoints Agent as its lawful attorney-in-fact to: (a) exercisable following the occurrence of an Event of Default that is continuing, (i) sign Borrower's name on any invoice or bill of lading for any account or drafts against account debtors; (ii) demand, collect, sue, and give releases to any account debtor for monies due, settle and adjust disputes and claims about the accounts directly with account debtors, and compromise, prosecute, or defend any action, claim, case, or proceeding about any Collateral (including filing a claim or voting a claim in any bankruptcy case in Agent's or Borrower's name, as Agent may elect); (iii) make, settle, and adjust all claims under Borrower's insurance policies; (iv) pay, contest or settle any Lien, charge, encumbrance, security interest, or other claim in or to the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (v) transfer the Collateral into the name of Agent or a third party as the UCC permits; and (vi) receive, open and dispose of mail addressed to Borrower; and (b) regardless of whether an Event of Default has occurred, (i) endorse Borrower's name on any checks, payment instruments, or other forms of payment or security; and (ii) notify all account debtors to pay Agent directly. Borrower hereby appoints Agent as its lawful attorney-in-fact to sign Borrower's name on any documents necessary to perfect or continue the perfection of Agent's security interest in the Collateral regardless of whether an Event of Default has occurred until all Secured Obligations have been satisfied in full and the Loan Documents have been terminated. Agent's foregoing appointment as Borrower's attorney in fact, and all of Agent's rights and powers, coupled with an interest, are irrevocable until all Secured Obligations have been fully repaid and performed and the Loan Documents have been terminated. Following the occurrence of an Event of Default that is continuing, Agent may, and at the direction of the Required Lenders shall, exercise all rights and remedies with respect to the Collateral under the Loan Documents or otherwise available to it under the UCC and other applicable law, including the right to release, hold, sell, lease, liquidate, collect, realize upon, or otherwise dispose of all or any part of the Collateral and the right to occupy, utilize, process and commingle the Collateral. All Agent's rights and remedies shall be cumulative and not exclusive.

10.2 Collection; Foreclosure. Upon the occurrence and during the continuance of any Event of Default, Agent may, and at the direction of the Required Lenders shall, at any time or from time to time, apply, collect, liquidate, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Agent may elect. Any such sale may be made either at public or private sale at its place of business or elsewhere. Borrower agrees that any such

public or private sale may occur upon ten (10) calendar days' prior written notice to Borrower. Agent may require Borrower to assemble the Collateral and make it available to Agent at a place designated by Agent that is reasonably convenient to Agent and Borrower. The proceeds of any sale, disposition or other realization upon all or any part of the Collateral shall be applied by Agent in the following order of priorities:

> First, to Agent and the Lenders in an amount sufficient to pay in full Agent's and the Lenders' reasonable costs and professionals' and advisors' fees and expenses as described in Section 11.12;
>
> Second, to the Lenders in an amount equal to the then unpaid amount of the Secured Obligations (including principal, interest, and the Default Rate interest), in such order and priority as Agent may choose in its sole discretion; and
>
> Finally, after the full and final payment in cash of all of the Secured Obligations (other than inchoate obligations), to any creditor holding a junior Lien on the Collateral, or to Borrower or its representatives or as a court of competent jurisdiction may direct.

Agent shall be deemed to have acted reasonably in the custody, preservation and disposition of any of the Collateral if it complies with the obligations of a secured party under the UCC.

10.3 No Waiver. Agent shall be under no obligation to marshal any of the Collateral for the benefit of Borrower or any other Person, and Borrower expressly waives all rights, if any, to require Agent to marshal any Collateral.

10.4 Cumulative Remedies. The rights, powers and remedies of Agent hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of or election of remedies with respect to any other rights, powers and remedies of Agent.

SECTION 11 MISCELLANEOUS

11.1 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

11.2 Notice. Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication (including the delivery of Financial Statements) that is required, contemplated, or permitted under the Loan Documents or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier of: (i) the day of transmission by electronic mail or hand delivery or delivery by an overnight express service or overnight mail delivery service; or (ii) the third calendar day after deposit in the United States of America mails,

with proper first class postage prepaid, in each case addressed to the party to be notified as follows:

(a) If to Agent:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer, Bryan Jadot, Jeff Ralto and Michael Dutra
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@htgc.com, bjadot@htgc.com, jralto@htgc.com and mdutra@htgc.com
Telephone: 650-289-3060

(b) If to the Lenders:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer, Bryan Jadot, Jeff Ralto and Michael Dutra
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@htgc.com, bjadot@htgc.com, jralto@htgc.com and mdutra@htgc.com
Telephone: 650-289-3060

(c) If to Borrower:

REPLIMUNE GROUP, INC.
Attention: Philip Astley-Sparke, CEO
500 Unicorn Park Dr. 3rd Floor
Woburn, MA, 01801
email: ***
Telephone: ***

or to such other address as each party may designate for itself by like notice.

11.3 Entire Agreement; Amendments.

(a) This Agreement and the other Loan Documents constitute the entire agreement and understanding of the parties hereto in respect of the subject matter hereof and thereof, and supersede and replace in their entirety any prior proposals, term sheets, non-disclosure or confidentiality agreements, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof or thereof (including Agent's proposal letter dated September 7, 2022, and the Non-Disclosure Agreement).

(b) Neither this Agreement, any other Loan Document, nor any terms hereof or thereof may be amended, supplemented or modified except in accordance with the

provisions of this Section 11.3(b). The Required Lenders and Borrower party to the relevant Loan Document may, or, with the written consent of the Required Lenders, the Agent and Borrower party to the relevant Loan Document may, from time to time, (i) enter into written amendments, supplements or modifications hereto and to the other Loan Documents for the purpose of adding any provisions to this Agreement or the other Loan Documents or changing in any manner the rights of the Lenders or of Borrower hereunder or thereunder or (ii) waive, on such terms and conditions as the Required Lenders or the Agent, as the case may be, may specify in such instrument, any of the requirements of this Agreement or the other Loan Documents or any Default or Event of Default and its consequences; provided, however, that no such waiver and no such amendment, supplement or modification shall (A) forgive the principal amount or extend the final scheduled date of maturity of any Loan, extend the scheduled date of any amortization payment in respect of any Term Loan, reduce the stated rate of any interest or fee payable hereunder) or extend the scheduled date of any payment thereof, in each case without the written consent of each Lender directly affected thereby; (B) eliminate or reduce the voting rights of any Lender under this Section 11.3(b) without the written consent of such Lender; (C) reduce any percentage specified in the definition of Required Lenders, consent to the assignment or transfer by Borrower of any of its rights and obligations under this Agreement and the other Loan Documents (except as otherwise permitted herein), release all or substantially all of the Collateral or release a Borrower from its obligations under the Loan Documents (except as otherwise permitted herein), in each case without the written consent of all Lenders; or (D) amend, modify or waive any provision of Section 11.18 or Addendum 3 without the written consent of the Agent. Any such waiver and any such amendment, supplement or modification shall apply equally to each Lender and shall be binding upon Borrower, the Lender, the Agent and all future holders of the Loans.

11.4 No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

11.5 No Waiver. The powers conferred upon Agent and the Lenders by this Agreement are solely to protect its rights hereunder and under the other Loan Documents and its interest in the Collateral and shall not impose any duty upon Agent or the Lenders to exercise any such powers. No omission or delay by Agent or the Lenders at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrower at any time designated, shall be a waiver of any such right or remedy to which Agent or the Lenders is entitled, nor shall it in any way affect the right of Agent or the Lenders to enforce such provisions thereafter.

11.6 Survival. All agreements, representations and warranties contained in this Agreement and the other Loan Documents or in any document delivered pursuant hereto or thereto shall be for the benefit of Agent and the Lenders and shall survive the execution and delivery of this Agreement. Sections 6.3 and 11.15 shall survive the termination of this Agreement.

11.7 Successors and Assigns. The provisions of this Agreement and the other Loan Documents shall inure to the benefit of and be binding on Borrower and its permitted assigns (if any). Borrower shall not assign its obligations under this Agreement or any of the other Loan Documents without Agent's express prior written consent, and any such attempted assignment shall be void and of no effect. Agent and the Lenders may not assign, transfer, or endorse its rights hereunder and under the other Loan Documents without the prior written consent of Parent (such consent not to be unreasonably withheld, conditioned or delayed); provided that (i) no such consent shall be required for any such assignment, transfer or endorsement (x) after the occurrence of an Event of Default that is continuing, or (y) to Agent or a Lender or Affiliate of any Lender or Agent, and all of such rights shall inure to the benefit of Agent's and the Lenders' successors and permitted assigns. Notwithstanding the foregoing, (x) no such assignment, transfer or endorsement may be made to any direct competitor of Borrower unless an Event of Default shall have occurred and be continuing, (y) in connection with any assignment by a Lender as a result of a forced divestiture at the request of any regulatory agency, the restrictions set forth herein shall not apply and Agent and the Lenders may assign, transfer or indorse its rights hereunder and under the other Loan Documents to any Person or party, and (z) in connection with a Lender's own financing or securitization transactions, the restrictions set forth herein shall not apply and Agent and the Lenders may assign, transfer or endorse its rights hereunder and under the other Loan Documents to any Person or party providing such financing or formed to undertake such securitization transaction and any transferee of such Person or party upon the occurrence of a default, event of default or similar occurrence with respect to such financing or securitization transaction; provided that no such sale, transfer, pledge or assignment under this clause (z) shall release such Lender from any of its obligations hereunder or substitute any such Person or party for such Lender as a party hereto until Agent shall have received and accepted an effective assignment agreement from such Person or party in form satisfactory to Agent executed, delivered and fully completed by the applicable parties thereto, and shall have received such other information regarding such assignee as Agent reasonably shall require. The Agent, acting solely for this purpose as an agent of Borrower, shall maintain at one of its offices in the United States a register for the recordation of the names and addresses of the Lender(s), and the Term Commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and Borrower, the Agent and the Lender(s) shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by Borrower and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

11.8 Participations. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of Borrower, maintain a register on which it enters the name and address of each participant and the principal amounts (and stated interest) of each participant's interest in the Loans or other obligations under the Loan Documents (the "Participant Register"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any participant or any information relating to a participant's interest in any commitments, loans, its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant

Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Agent (in its capacity as Agent) shall have no responsibility for maintaining a Participant Register. Borrower agrees that each participant shall be entitled to the benefits of the provisions in Addendum 1 attached hereto (subject to the requirements and limitations therein, including the requirements under Section 7 of Addendum 1 attached hereto (it being understood that the documentation required under Section 7 of Addendum 1 attached hereto shall be delivered to the participating Lender)) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to Section 11.7; provided that such participant shall not be entitled to receive any greater payment under Addendum 1 attached hereto, with respect to any participation, than its participating Lender would have been entitled to receive, except to the extent such entitlement to receive a greater payment results from a change in law that occurs after the participant acquired the applicable participation.

11.9 Governing Law. This Agreement and the other Loan Documents (other than the English Security Documents) shall be governed by, and construed and enforced in accordance with, the laws of the State of New York, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

11.10 Consent to Jurisdiction and Venue. All judicial proceedings (to the extent that the reference requirement of Section 11.11 is not applicable) arising in or under or related to this Agreement or any of the other Loan Documents may be brought in any state or federal court located in the State of New York. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to nonexclusive personal jurisdiction in New York County, State of New York; (b) waives any objection as to jurisdiction or venue in the New York County, State of New York; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement or the other Loan Documents. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 11.2, and shall be deemed effective and received as set forth in Section 11.2. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

11.11 Mutual Waiver of Jury Trial.

(a) Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert Person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes be resolved by a judge applying such applicable laws. EACH OF BORROWER, AGENT AND THE LENDERS SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY BORROWER AGAINST AGENT, THE LENDERS OR THEIR RESPECTIVE ASSIGNEE OR BY AGENT, THE LENDERS OR THEIR RESPECTIVE ASSIGNEE AGAINST

BORROWER. This waiver extends to all such Claims, including Claims that involve Persons other than Agent, Borrower and the Lenders; Claims that arise out of or are in any way connected to the relationship among Borrower, Agent and the Lenders; and any Claims for damages, breach of contract, tort, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement, any other Loan Document.

(b) [reserved]

(c) [reserved]

11.12 Professional Fees. Borrower promises to pay Agent's and the Lenders' reasonable and documented fees and out-of-pocket expenses necessary to finalize the loan documentation, including but not limited to reasonable and documented attorneys' fees, UCC searches, filing costs, and other miscellaneous out-of-pocket expenses. In addition, Borrower promises to pay any and all reasonable and documented attorneys' and other professionals' fees and out of pocket expenses incurred by Agent and the Lenders after the Closing Date in connection with or related to: (a) the Loan; (b) the administration, collection, or enforcement of the Loan; (c) the amendment or modification of the Loan Documents; (d) any waiver, consent, release, or termination under the Loan Documents; (e) the protection, preservation, audit, field exam, sale, lease, liquidation, or disposition of Collateral or the exercise of remedies with respect to the Collateral; (f) any legal, litigation, administrative, arbitration, or out of court proceeding in connection with or related to Borrower or the Collateral, and any appeal or review thereof; and (g) any bankruptcy, restructuring, reorganization, assignment for the benefit of creditors, workout, foreclosure, or other action related to Borrower, the Collateral, the Loan Documents, including representing Agent or the Lenders in any adversary proceeding or contested matter commenced or continued by or on behalf of Borrower's estate, and any appeal or review thereof.

11.13 Confidentiality. Agent and the Lenders acknowledge that certain items of Collateral and information provided to Agent and the Lenders by Borrower are confidential and proprietary information of Borrower, if and to the extent such information either (x) is marked as confidential by Borrower at the time of disclosure, or (y) should reasonably be understood to be confidential (the "Confidential Information"). Accordingly, Agent and the Lenders agree that any Confidential Information it may obtain in the course of acquiring, administering, or perfecting Agent's security interest in the Collateral shall not be disclosed to any other Person or entity in any manner whatsoever, in whole or in part, without the prior written consent of Borrower, except that Agent and the Lenders may disclose any such information: (a) to its Affiliates and its partners, investors, lenders, directors, officers, employees, agents, advisors, counsel, accountants, counsel, representative and other professional advisors if Agent or the Lenders in their sole discretion determines that any such party should have access to such information in connection with such party's responsibilities in connection with the Loan or this Agreement and, provided that such recipient of such Confidential Information either (i) agrees to be bound by the confidentiality provisions of this paragraph or (ii) is otherwise subject to confidentiality restrictions that reasonably protect against the disclosure of Confidential Information; (b) if such information is generally available to the public or to the extent such information becomes publicly available other than as a result of a breach of this Section or becomes available to Agent or any Lender, or any of their respective Affiliates on a non-confidential basis from a source other than the Borrower; (c) if required or appropriate in any

report, statement or testimony submitted to any governmental authority having or claiming to have jurisdiction over Agent or the Lenders and any rating agency; (d) if required or appropriate in response to any summons or subpoena or in connection with any litigation, to the extent permitted or deemed advisable by Agent's or the Lenders' counsel; (e) to comply with any legal requirement or law applicable to Agent or the Lenders or demanded by any governmental authority; (f) to the extent reasonably necessary in connection with the exercise of, or preparing to exercise, or the enforcement of, or preparing to enforce, any right or remedy under any Loan Document (including Agent's sale, lease, or other disposition of Collateral after an Event of Default), or any action or proceeding relating to any Loan Document; (g) to any participant or assignee of Agent or the Lenders permitted hereunder or any prospective participant or assignee permitted hereunder, provided, that such participant or assignee or prospective participant or assignee is subject to confidentiality restrictions that reasonably protect against the disclosure of Confidential Information; (h) to any investor or potential investor (and each of their respective Affiliates or clients) in the Agent or the Lenders (or each of their respective Affiliates); provided that such investor, potential investor, Affiliate or client is subject to confidentiality obligations with respect to the Confidential Information; (i) otherwise to the extent consisting of general portfolio information that does not identify Borrower; or (j) otherwise with the prior consent of Borrower; provided, that any disclosure made in violation of this Agreement shall not affect the obligations of Borrower or any of its Affiliates or any guarantor under this Agreement or the other Loan Documents. Agent's and the Lenders' obligations under this Section 11.13 shall supersede all of their respective obligations under the Non-Disclosure Agreement.

11.14 Assignment of Rights. Borrower acknowledges and understands that Agent or the Lenders may, subject to (and in compliance with) Section 11.7, sell and assign all or part of its interest hereunder and under the Loan Documents to any Person or entity (an "Assignee"). After such assignment the term "Agent" or "Lender" as used in the Loan Documents shall mean and include such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Agent and the Lenders hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, Agent and the Lenders shall retain all rights, powers and remedies hereby given. No such assignment by Agent or the Lenders shall relieve Borrower of any of its obligations hereunder. Each Lender agrees that in the event of any transfer by it of the promissory note(s) (if any), it will endorse thereon a notation as to the portion of the principal of the promissory note(s), which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.

11.15 Revival of Secured Obligations. This Agreement and the Loan Documents shall remain in full force and effect and continue to be effective if any petition is filed by or against Borrower for liquidation or reorganization, if Borrower becomes insolvent or makes an assignment for the benefit of creditors, if a receiver or trustee is appointed for all or any significant part of Borrower's assets, or if any payment or transfer of Collateral is recovered from Agent or the Lenders. The Loan Documents and the Secured Obligations and Collateral security shall continue to be effective, or shall be revived or reinstated, as the case may be, if at any time payment and performance of the Secured Obligations or any transfer of Collateral to Agent, or any part thereof is rescinded, avoided or avoidable, reduced in amount, or must otherwise be restored or returned by, or is recovered from, Agent, the Lenders or by any obligee of the Secured Obligations, whether as a "voidable preference," "fraudulent conveyance," or otherwise, all as though such payment, performance, or transfer of Collateral had not been made.

In the event that any payment, or any part thereof, is rescinded, reduced, avoided, avoidable, restored, returned, or recovered, the Loan Documents and the Secured Obligations shall be deemed, without any further action or documentation, to have been revived and reinstated except to the extent of the full, final, and indefeasible payment to Agent or the Lenders in cash.

11.16 Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument. Delivery of an executed signature page of this Agreement by facsimile or other electronic mail transmission shall be effective as delivery of a manually executed counterpart hereof. A set of the copies of this Agreement signed by all the parties shall be lodged with Borrower and Agent. The words "execution," "signed," "signature," and words of like import in any Assignment and Assumption shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, the California Uniform Electronics Transactions Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

11.17 No Third Party Beneficiaries. No provisions of the Loan Documents are intended, nor will be interpreted, to provide or create any third-party beneficiary rights or any other rights of any kind in any Person other than Agent, the Lenders and Borrower unless specifically provided otherwise herein, and, except as otherwise so provided, all provisions of the Loan Documents will be personal and solely among Agent, the Lenders and Borrower.

11.18 Agency. Agent and each Lender hereby agree to the terms and conditions set forth on Addendum 3 attached hereto. Borrower acknowledges and agrees to the terms and conditions set forth on Addendum 3 attached hereto.

11.19 Publicity. None of the parties hereto nor any of its respective member businesses and Affiliates shall, without the other parties' prior written consent (which shall not be unreasonably withheld or delayed), publicize or use (a) the other party's name (including a brief description of the relationship among the parties hereto), logo or hyperlink to such other parties' web site, separately or together, in written and oral presentations, advertising, promotional and marketing materials, client lists, public relations materials or on its web site (together, the " Publicity Materials"); (b) the names of officers of such other parties in the Publicity Materials; and (c) such other parties' name, trademarks, servicemarks in any news or press release concerning such party; provided however, notwithstanding anything to the contrary herein, no such consent shall be required (i) to the extent necessary to comply with the requests of any regulators, legal requirements or laws applicable to such party, pursuant to any listing agreement with any national securities exchange (so long as such party provides prior notice to the other party hereto to the extent reasonably practicable) and (ii) to comply with Section 11.13.

11.20 Multiple Borrowers. Each Borrower hereby agrees to the terms and conditions set forth on Addendum 4 attached hereto.

11.21 Consent to Bail-In: Notwithstanding any other term of any Loan Document or any other agreement, arrangement or understanding between the parties, each party acknowledges and accepts that any liability of any party to any other party under or in connection with the Loan Documents may be subject to Bail-In Action by the relevant Resolution Authority and acknowledges and accepts to be bound by the effect of:

(a) any Bail-In Action in relation to any such liability, including (without limitation):

(i) a reduction, in full or in part, in the principal amount, or outstanding amount due (including any accrued but unpaid interest) in respect of any such liability;

(ii) a conversion of all, or part of, any such liability into shares or other instruments of ownership that may be issued to, or conferred on, it; and

(iii) a cancellation of any such liability; and

(b) a variation of any term of any Loan Document to the extent necessary to give effect to any Bail-In Action in relation to any such liability.

(SIGNATURES TO FOLLOW)

IN WITNESS WHEREOF, Borrower, Agent and the Lenders have duly executed and delivered this Loan and Security Agreement as of the day and year first above written.

BORROWER:

REPLIMUNE GROUP, INC.

Signature: /s/ Philip Astley-Sparke
Print Name: Philip Astley-Sparke
Title: Chief Executive Officer

REPLIMUNE, INC.

Signature: /s/ Philip Astley-Sparke
Print Name: Philip Astley-Sparke
Title: Treasurer and Secretary

REPLIMUNE LIMITED

Signature: /s/ Philip Astley-Sparke
Print Name: Philip Astley-Sparke
Title: Director

AGENT:

HERCULES CAPITAL, INC.

Signature: /s/ Seth Meyer

Print Name: Seth Meyer

Title: Chief Financial Officer

LENDERS:

HERCULES CAPITAL, INC.

Signature: /s/ Seth Meyer

Print Name: Seth Meyer

Title: Chief Financial Officer

LENDERS:

HERCULES PRIVATE GLOBAL VENTURE GROWTH FUND I L.P.
By: Hercules Adviser LLC, its Investment Adviser

Signature: /s/ Seth Meyer

Print Name: Seth Meyer

Title: Authorized Signatory

Table of Addenda, Exhibits and Schedules

ADDENDUM 1 to LOAN AND SECURITY AGREEMENT

TAXES; INCREASED COSTS

1. **Defined Terms**. For purposes of this Addendum 1:

   a. "**Connection Income Taxes**" means Other Connection Taxes that are imposed on or measured by net income (however denominated) or that are franchise Taxes or branch profits Taxes.

   b. "**Excluded Taxes**" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient, (i) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (A) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (B) that are Other Connection Taxes, (ii) in the case of a Lender, U.S. federal withholding Taxes imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Term Commitment pursuant to a law in effect on the date on which (A) such Lender acquires such interest in the Loan or Term Commitment or (B) such Lender changes its lending office, except in each case to the extent that, pursuant to Section 2 or Section 4 of this Addendum 1, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (iii) Taxes attributable to such Recipient's failure to comply with Section 7 of this Addendum 1, (iv) any withholding Taxes imposed under FATCA, and (v) so long as no Event of Default has occurred, any UK Withholding Tax imposed on interest payable to or for the account of an assignee of a Lender with respect to an applicable interest in a Term Commitment under Section 11.7 to the extent such assignee was not (assuming completion of all relevant procedural formalities) entitled to an exemption from or reduction of UK Withholding Tax with respect to the relevant payment based on the circumstances existing at the time of the relevant assignment.

   c. "**FATCA**" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code, and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among governmental authorities and implementing such Sections of the Code.

   d. "**Foreign Lender**" means a Lender that is not a U.S. Person.

e. "**Indemnified Taxes**" means (i) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of Borrower under any Loan Document and (ii) to the extent not otherwise described in clause (i), Other Taxes.

f. "**Other Connection Taxes**" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

g. "**Other Taxes**" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

h. "**Recipient**" means the Agent or any Lender, as applicable.

i. "**Withholding Agent**" means Borrower and the Agent.

2. **Payments Free of Taxes**. Any and all payments by or on account of any obligation of Borrower under any Loan Document shall be made without deduction or withholding for any Taxes, except as required by applicable law. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires the deduction or withholding of any Tax from any such payment by a Withholding Agent, then the applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant governmental authority in accordance with applicable law and, if such Tax is an Indemnified Tax, then the sum payable by Borrower shall be increased as necessary so that after such deduction or withholding has been made (including such deductions and withholdings applicable to additional sums payable under this Section 2 or Section 4 of this Addendum 1) the applicable Recipient receives an amount equal to the sum it would have received had no such deduction or withholding been made.

3. **Payment of Other Taxes by Borrower**. Borrower shall timely pay to the relevant governmental authority in accordance with applicable law, or at the option of the Agent timely reimburse it for the payment of, any Other Taxes.

4. **Indemnification by Borrower**. Borrower shall indemnify each Recipient, within 10 days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under Section 2 of this Addendum 1 or this Section 4) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable

expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant governmental authority. A certificate as to the amount of such payment or liability delivered to Borrower by a Lender (with a copy to the Agent), or by the Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error. In addition, Borrower agrees to pay, and to save the Agent and any Lender harmless from, any and all liabilities with respect to, or resulting from any delay in paying, any and all excise, sales or other similar taxes (excluding taxes imposed on or measured by the net income of the Agent or such Lender) that may be payable or determined to be payable with respect to any of the Collateral or this Agreement.

5. **Indemnification by the Lenders**. Each Lender shall severally indemnify the Agent, within 10 days after demand therefor, for (a) any Indemnified Taxes attributable to such Lender (but only to the extent that Borrower has not already indemnified the Agent for such Indemnified Taxes and without limiting the obligation of Borrower to do so), (b) any Taxes attributable to such Lender's failure to comply with the provisions of Section 11.8 of the Agreement relating to the maintenance of a Participant Register and (c) any Excluded Taxes attributable to such Lender, in each case, that are payable or paid by the Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant governmental authority. A certificate as to the amount of such payment or liability delivered to any Lender by the Agent shall be conclusive absent manifest error. Each Lender hereby authorizes the Agent to set off and apply any and all amounts at any time owing to such Lender under any Loan Document or otherwise payable by the Agent to the Lender from any other source against any amount due to the Agent under this Section 5.

6. **Evidence of Payments**. As soon as practicable after any payment of Taxes by Borrower to a governmental authority pursuant to the provisions of this Addendum 1, Borrower shall deliver to the Agent the original or a certified copy of a receipt issued by such governmental authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Agent.

7. **Status of Lenders**.

   a. Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower and the Agent (or submit to the appropriate tax authority, as applicable), at the time or times reasonably requested by Borrower or the Agent, such properly completed and executed documentation reasonably requested by Borrower or the Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by Borrower or the Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by Borrower or the Agent as will enable Borrower or the Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution

and submission of such documentation (other than such documentation set forth in Sections 7(b)(i), 7(b)(ii) and 7(b)(iv) of this Addendum 1) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender. Notwithstanding anything to the contrary herein, a Lender shall be deemed to have satisfied the requirements of this Section 7 in respect of any deduction or withholding for or on account of tax imposed by the United Kingdom if such Lender has either (x) notified Borrower or Agent of its passport number under the HMRC treaty passport scheme (and for the avoidance of doubt, the provision by a Lender of its HMRC treaty passport scheme number in Schedule 1.1 hereto shall satisfy this requirement); or (y) submitted an application for withholding tax relief under the applicable income tax treaty to the appropriate tax authority, in each case without regard to whether any document required from HMRC has been obtained.

b. Without limiting the generality of the foregoing, in the event that Borrower is a U.S. Person,

i. any Lender that is a U.S. Person shall deliver to Borrower and the Agent on or prior to the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

ii. any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Agent), whichever of the following is applicable:

A. in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

B. executed copies of IRS Form W-8ECI;

C. in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit H-1 to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of Borrower within the meaning of Section 871(h)(3)(B) of the Code, or a "controlled foreign corporation" related to Borrower as described in Section 881(c)(3)(C) of the Code (a "**U.S. Tax Compliance Certificate**") and (y) executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E; or

D. to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN, IRS Form W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit H-2 or Exhibit H-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit H-4 on behalf of each such direct and indirect partner;

iii. any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower and the Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of Borrower or the Agent), executed copies of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit Borrower or the Agent to determine the withholding or deduction required to be made; and

iv. if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Borrower and the Agent at the time or times prescribed by law and at such time or times reasonably requested by Borrower or the Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code)

and such additional documentation reasonably requested by Borrower or the Agent as may be necessary for Borrower and the Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (iv), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

c. Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify Borrower and the Agent in writing of its legal inability to do so.

8. **Treatment of Certain Refunds**. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to the provisions of this Addendum 1 (including by the payment of additional amounts pursuant to the provisions of this Addendum 1), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under the provisions of this Addendum 1 with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant governmental authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this Section 8 (plus any penalties, interest or other charges imposed by the relevant governmental authority) in the event that such indemnified party is required to repay such refund to such governmental authority. Notwithstanding anything to the contrary in this Section 8, in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this Section 8 the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This Section 8 shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

9. **Increased Costs**. If any change in applicable law shall subject any Recipient to any Taxes (other than (A) Indemnified Taxes, (B) Taxes described in clauses (ii) through (iv) of the definition of Excluded Taxes and (C) Connection Income Taxes) on its loans, loan principal, commitments, or other obligations, or its deposits, reserves, other liabilities or capital attributable thereto, and the result shall be to increase the cost to such Recipient of making, converting to, continuing or maintaining any Term Loan or of maintaining its obligation to make any such Loan, or to reduce the amount of any sum received or receivable by such Recipient (whether of principal, interest or any other amount), then, upon the request of such Recipient, Borrower will pay to such Recipient such additional

amount or amounts as will compensate such Recipient for such additional costs incurred or reduction suffered.

10. **Survival**. Each party's obligations under the provisions of this Addendum 1 shall survive the resignation or replacement of the Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Term Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

ADDENDUM 2 to LOAN AND SECURITY AGREEMENT

[Reserved]

ADDENDUM 3 to LOAN AND SECURITY AGREEMENT

Agent and Lender Terms

(a) Each Lender hereby irrevocably appoints Hercules Capital, Inc. to act on its behalf as the Agent hereunder and under the other Loan Documents and authorizes the Agent to take such actions on its behalf and to exercise such powers as are delegated to the Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto.

(b) Each Lender agrees to indemnify the Agent in its capacity as such (to the extent not reimbursed by Borrower and without limiting the obligation of Borrower to do so), according to its respective Term Commitment percentages (based upon the total outstanding Term Loan Commitments) in effect on the date on which indemnification is sought under this Addendum 3, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind whatsoever that may at any time be imposed on, incurred by or asserted against the Agent in any way relating to or arising out of, this Agreement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by the Agent under or in connection with any of the foregoing. The agreements in this Section shall survive the payment of the Loans and all other amounts payable hereunder.

(c) Agent in Its Individual Capacity. The Person serving as the Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not the Agent and the term "Lender" shall, unless otherwise expressly indicated or unless the context otherwise requires, include each such Person serving as Agent hereunder in its individual capacity.

(d) Exculpatory Provisions. The Agent shall have no duties or obligations except those expressly set forth herein and in the other Loan Documents. Without limiting the generality of the foregoing, the Agent shall not:

(i) be subject to any fiduciary or other implied duties, regardless of whether any Default or any Event of Default has occurred and is continuing;

(ii) have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that the Agent is required to exercise as directed in writing by the Lenders, provided that the Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose the Agent to liability or that is contrary to any Loan Document or applicable law; and

(iii) except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and the Agent shall not be liable for the failure to disclose, any information relating to Borrower or any of its Affiliates that is communicated to or obtained by any Person serving as the Agent or any of its Affiliates in any capacity.

(e) The Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of the Lenders or as the Agent shall believe in good faith shall be necessary, under the circumstances or (ii) in the absence of its own gross negligence or willful misconduct.

(f) The Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any Default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Section 4 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to the Agent.

(g) Reliance by Agent. Agent may rely, and shall be fully protected in acting, or refraining to act, upon, any resolution, statement, certificate, instrument, opinion, report, notice, request, consent, order, bond or other paper or document that it has no reason to believe to be other than genuine and to have been signed or presented by the proper party or parties or, in the case of cables, telecopies and telexes, to have been sent by the proper party or parties. In the absence of its gross negligence or willful misconduct, Agent may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to Agent and conforming to the requirements of the Loan Agreement or any of the other Loan Documents. Agent may consult with counsel, and any opinion or legal advice of such counsel shall be full and complete authorization and protection in respect of any action taken, not taken or suffered by Agent hereunder or under any Loan Documents in accordance therewith. Agent shall have the right at any time to seek instructions concerning the administration of the Collateral from any court of competent jurisdiction. Agent shall not be under any obligation to exercise any of the rights or powers granted to Agent by this Agreement, the Loan Agreement and the other Loan Documents at the request or direction of the Lenders unless Agent shall have been provided by the Lenders with adequate security and indemnity against the costs, expenses and liabilities that may be incurred by it in compliance with such request or direction.

ADDENDUM 4 to LOAN AND SECURITY AGREEMENT

Multiple Borrower Terms

(a) Borrower's Agent. Each Borrower hereby irrevocably appoints Parent as its agent, attorney-in-fact and legal representative for all purposes, including requesting disbursement of the Term Loan and receiving account statements and other notices and communications to Borrower (or any of them) from the Agent or any Lender. The Agent may rely, and shall be fully protected in relying, on any request for the Term Loan, disbursement instruction, report, information or any other notice or communication made or given by Parent, whether in its own name or on behalf of one or more of the other Borrowers, and the Agent shall not have any obligation to make any inquiry or request any confirmation from or on behalf of any other Borrower as to the binding effect on it of any such request, instruction, report, information, other notice or communication, nor shall the joint and several character of Borrower's obligations hereunder be affected thereby.

(b) Waivers. Each Borrower hereby waives: (i) any right to require the Agent to institute suit against, or to exhaust its rights and remedies against, any other Borrower or any other person, or to proceed against any property of any kind which secures all or any part of the Secured Obligations, or to exercise any right of offset or other right with respect to any reserves, credits or deposit accounts held by or maintained with the Agent or any Indebtedness of the Agent or any Lender to any other Borrower, or to exercise any other right or power, or pursue any other remedy the Agent or any Lender may have; (ii) any defense arising by reason of any disability or other defense of any other Borrower or any guarantor or any endorser, co-maker or other person, or by reason of the cessation from any cause whatsoever of any liability of any other Borrower or any guarantor or any endorser, co-maker or other person, with respect to all or any part of the Secured Obligations, or by reason of any act or omission of the Agent or others which directly or indirectly results in the discharge or release of any other Borrower or any guarantor or any other person or any Secured Obligations or any security therefor, whether by operation of law or otherwise; (iii) any defense arising by reason of any failure of the Agent to obtain, perfect, maintain or keep in force any Lien on, any property of any Borrower or any other person; (iv) any defense based upon or arising out of any bankruptcy, insolvency, reorganization, arrangement, readjustment of debt, liquidation or dissolution proceeding commenced by or against any other Borrower or any guarantor or any endorser, co-maker or other person, including without limitation any discharge of, or bar against collecting, any of the Secured Obligations (including without limitation any interest thereon), in or as a result of any such proceeding. Until all of the Secured Obligations (other than contingent obligations for which no Claim has been made) have been paid, performed, and discharged in full, nothing shall discharge or satisfy the liability of any Borrower hereunder except the full performance and payment of all of the Secured Obligations (other than contingent obligations for which no Claim has been made). If any claim is ever made upon the Agent for repayment or recovery of any amount or amounts received by the Agent in payment of or on account of any of the Secured Obligations, because of any claim that any such payment constituted a preferential transfer or fraudulent conveyance, or for any other reason whatsoever, and

the Agent repays all or part of said amount by reason of any judgment, decree or order of any court or administrative body having jurisdiction over the Agent or any of its property, or by reason of any settlement or compromise of any such claim effected by the Agent with any such claimant (including without limitation the any other Borrower), then and in any such event, each Borrower agrees that any such judgment, decree, order, settlement and compromise shall be binding upon such Borrower, notwithstanding any revocation or release of this Agreement or the cancellation of any note or other instrument evidencing any of the Secured Obligations, or any release of any of the Secured Obligations, and each Borrower shall be and remain liable to the Agent and the Lenders under this Agreement for the amount so repaid or recovered, to the same extent as if such amount had never originally been received by the Agent or any Lender, and the provisions of this sentence shall survive, and continue in effect, notwithstanding any revocation or release of this Agreement. Each Borrower hereby expressly and unconditionally waives all rights of subrogation, reimbursement and indemnity of every kind against any other Borrower, and all rights of recourse to any assets or property of any other Borrower, and all rights to any collateral or security held for the payment and performance of any Secured Obligations, including (but not limited to) any of the foregoing rights which Borrower may have under any present or future document or agreement with any other Borrower or other person, and including (but not limited to) any of the foregoing rights which any Borrower may have under any equitable doctrine of subrogation, implied contract, or unjust enrichment, or any other equitable or legal doctrine, in each case until the Secured Obligations have been repaid in full.

(c) Consents. Each Borrower hereby consents and agrees that, without notice to or by Borrower and without affecting or impairing in any way the obligations or liability of Borrower hereunder, the Agent may, from time to time before or after revocation of this Agreement, do any one or more of the following in its sole and absolute discretion: (i) accept partial payments of, compromise or settle, renew, extend the time for the payment, discharge, or performance of, refuse to enforce, and release all or any parties to, any or all of the Secured Obligations; (ii) grant any other indulgence to any Borrower or any other Person in respect of any or all of the Secured Obligations or any other matter; (iii) accept, release, waive, surrender, enforce, exchange, modify, impair, or extend the time for the performance, discharge, or payment of, any and all property of any kind securing any or all of the Secured Obligations or any guaranty of any or all of the Secured Obligations, or on which the Agent at any time may have a Lien, or refuse to enforce its rights or make any compromise or settlement or agreement therefor in respect of any or all of such property; (iv) substitute or add, or take any action or omit to take any action which results in the release of, any one or more other Borrowers or any endorsers or guarantors of all or any part of the Secured Obligations, including, without limitation one or more parties to this Agreement, regardless of any destruction or impairment of any right of contribution or other right of Borrower; and (v) apply any sums received from any other Borrower, any guarantor, endorser, or co-signer, or from the disposition of any Collateral or security, to any Indebtedness whatsoever owing from such person or secured by such Collateral or security, in such manner and order as the Agent determines in its sole discretion, and regardless of whether such Indebtedness is part of the Secured Obligations, is secured, or is due and payable. Each Borrower consents and agrees that the Agent shall be under no obligation

to marshal any assets in favor of Borrower, or against or in payment of any or all of the Secured Obligations. Each Borrower further consents and agrees that the Agent shall have no duties or responsibilities whatsoever with respect to any property securing any or all of the Secured Obligations. Without limiting the generality of the foregoing, the Agent shall have no obligation to monitor, verify, audit, examine, or obtain or maintain any insurance with respect to, any property securing any or all of the Secured Obligations.

(d) Independent Liability. Each Borrower hereby agrees that one or more successive or concurrent actions may be brought hereon against such Borrower, in the same action in which any other Borrower may be sued or in separate actions, as often as deemed advisable by Agent. Each Borrower is fully aware of the financial condition of each other Borrower and is executing and delivering this Agreement based solely upon its own independent investigation of all matters pertinent hereto, and such Borrower is not relying in any manner upon any representation or statement of the Agent or any Lender with respect thereto. Each Borrower represents and warrants that it is in a position to obtain, and each Borrower hereby assumes full responsibility for obtaining, any additional information concerning any other Borrower's financial condition and any other matter pertinent hereto as such Borrower may desire, and such Borrower is not relying upon or expecting the Agent to furnish to it any information now or hereafter in the Agent's possession concerning the same or any other matter.

(e) Subordination. All Indebtedness of a Borrower or any Subsidiary of a Borrower now or hereafter arising held by another Borrower or Subsidiary of a Borrower is subordinated to the Secured Obligations and Borrower holding the Indebtedness shall take all actions reasonably requested by Agent to effect, to enforce and to give notice of such subordination and to dispose of any such Indebtedness if the Agent is enforcing over shares in the capital of a Borrower or any Subsidiary or holding company of a Borrower, or if the Indebtedness is held by a Subsidiary of a Borrower, such Borrower shall take all actions reasonably requested by Agent to cause that Borrower to effect, to enforce and to give notice of such subordination and to permit the Agent to dispose of any such Indebtedness if the Agent is enforcing over shares in the capital of a Borrower or any Subsidiary or holding company of a Borrower.

(f) Service of Process. Each Borrower and Subsidiary that is organized outside of the United States of America Parent as its agent for the purpose of accepting service of any process in the United States of America. Each Borrower shall take all actions, to ensure that such appointment remains effective at all times.

EXHIBIT A

ADVANCE REQUEST

To: Agent: Date: _____, 20[ ]
Hercules Capital, Inc. (the "Agent")
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301
email: legal@htgc.com
Attn: Chief Legal Officer, Bryan Jadot, Jeff Ralto
and Michael Dutra

Replimune Group, Inc., a Delaware corporation ("Borrower"), hereby requests from Hercules Capital, Inc., a Maryland corporation ("Lender") an Advance in the amount of _____ Dollars ($ _____) on, _____, _____ (the "Advance Date") pursuant to the Loan and Security Agreement among Borrower and other Borrowers party thereto, Agent and the Lender (the "Agreement"). Capitalized words and other terms used but not otherwise defined herein are used with the same meanings as defined in the Agreement.

Please:

(a) Issue a check payable to Borrower _____

or

(b) Wire Funds to Borrower's account _____ [IF FILED PUBLICLY, ACCOUNT INFO REDACTED FOR SECURITY PURPOSES]

Bank: _____
Address: _____
_____
ABA Number: _____
Account Number: _____
Account Name: _____
Contact Person: _____
Phone Number _____
To Verify Wire Info:
Email address: _____

Borrower represents that the conditions precedent to the Advance set forth in the Agreement are satisfied and shall be satisfied upon the making of such Advance, including but not limited to: (i) that no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing; (ii) that the representations and warranties set forth in the Agreement are and shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date; (iii) that Borrower is in compliance with all the terms and provisions set forth in each Loan Document on its part to be

observed or performed; and (iv) that as of the Advance Date, no Default or Event of Default has occurred and is continuing under the Loan Documents. Borrower understands and acknowledges that Agent has the right to review the financial information supporting this representation and, based upon such review, the Lender may decline to fund the requested Advance if the conditions specified in the Agreement have not been satisfied at such time.

Borrower hereby represents that Borrower's corporate status and locations have not changed since the date of the Agreement or, if the Attachment to this Advance Request is completed, are as set forth in the Attachment to this Advance Request.

Borrower agrees to notify Agent promptly before the funding of the Loan if any of the matters which have been represented above shall not be true and correct on the Borrowing Date and if Agent has received no such notice before the Advance Date then the statements set forth above shall be deemed to have been made and shall be deemed to be true and correct as of the Advance Date.

Executed as of [ ], 20[ ].

BORROWER: **REPLIMUNE GROUP, INC.**

SIGNATURE: _____
TITLE: _____
PRINT NAME: _____

ATTACHMENT TO ADVANCE REQUEST

Dated: _____

Borrower hereby represents and warrants to Agent that Borrower's current name and organizational status is as follows:

Name:	Replimune Group, Inc.
Type of organization:	Corporation
State of organization:	Delaware
Organization file number:	6467082

Borrower hereby represents and warrants to Agent that the street addresses, cities, states and postal codes of its current locations are as follows:

500 Unicorn Park Dr., 3rd Floor, Woburn MA 01801

EXHIBIT B

NAME, LOCATIONS, AND OTHER INFORMATION FOR BORROWER

1. Borrower represents and warrants to Agent that Borrower's current name and organizational status as of the Closing Date is as follows:

Name:	Replimune Group, Inc.
Type of organization:	Corporation
State of organization:	Delaware
Organization file number:	6467082

Name:	Replimune, Inc.
Type of organization:	Corporation
State of organization:	Delaware
Organization file number:	5711367

Name:	Replimune Limited
Type of organization:	Company
State of organization:	England and Wales
Registered number:	09496393

2. Borrower represents and warrants to Agent that for five (5) years prior to the Closing Date, Borrower did not do business under any other name or organization or form except the following:

N/A

3. Borrower represents and warrants to Agent that its chief executive office is located at:

Parent and Replimune, Inc. - 500 Unicorn Park Dr., 3rd Floor, Woburn MA 01801

Replimune UK - 69 Innovation Drive, Milton Park, Abingdon, Oxfordshire, United Kingdom, OX14 4RQ

EXHIBIT C

[Reserved]

EXHIBIT D

Deposit Accounts

Bank Name	Account Number	Branch Address	Company/ Subsidiary	Purpose of Account
Silicon Valley Bank	***	**3005 Tasman Dr, Santa Clara, CA 95054**	**Replimune, Inc. (US)**	***
Silicon Valley Bank	***	**3005 Tasman Dr, Santa Clara, CA 95054**	**Replimune, Inc. (US)**	***
Silicon Valley Bank	***	**3005 Tasman Dr, Santa Clara, CA 95054**	**Replimune Group, Inc. (US)**	***
Silicon Valley Bank	***	**3005 Tasman Dr, Santa Clara, CA 95054**	**Replimune, Inc. (US)**	***
Silicon Valley Bank	***	**Alphabeta, 14-18 Finsbury Square London, GB EC2A 1BR**	**Replimune Limited (UK)**	***
Silicon Valley Bank	***	**Alphabeta, 14-18 Finsbury Square London, GB EC2A 1BR**	**Replimune Limited (UK)**	***
Silicon Valley Bank	***	**Alphabeta, 14-18 Finsbury Square London, GB EC2A 1BR**	**Replimune Limited (UK)**	***

Accounts Holding Investment Property

Account	Identifier	Description	Company/Subsidiary
Capital Advisors Group	***	**Investments**	**Replimune Securities Corporation**
Silicon Valley Bank	***	**Investments**	**Replimune Securities Corporation**

EXHIBIT E

COMPLIANCE CERTIFICATE

Hercules Capital, Inc. (as "Agent")
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

Reference is made to that certain Loan and Security Agreement dated October 6, 2022 and the Loan Documents (as defined therein) entered into in connection with such Loan and Security Agreement all as may be amended from time to time (hereinafter referred to collectively as the "Loan Agreement") by and among Hercules Capital, Inc. (the "Agent"), the several banks and other financial institutions or entities from time to time party thereto (collectively, the "Lender"), Replimune Group, Inc., a Delaware corporation (the "Company"), and each other Borrower that is party thereto. All capitalized terms not defined herein shall have the same meaning as defined in the Loan Agreement.

The undersigned is an Officer of the Company, knowledgeable of all Company financial matters, and is authorized to provide certification of information regarding the Company; hereby certifies, in such capacity and not in any individual capacity, that, for the period ending _____, no fact or condition exists that would (or would, with the passage of time, the giving or notice, or both) constitute a Default or an Event of Default and hereby reaffirms that all representations and warranties contained therein are true and correct on and as of the date of this Compliance Certificate with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date, after giving effect in all cases to any standard(s) of materiality contained in the Loan Agreement as to such representations and warranties. Attached are the required documents supporting the above certification. The undersigned further certifies that these are prepared in accordance with GAAP (except for the absence of footnotes with respect to unaudited financial statement and subject to normal year end adjustments) and are consistent from one period to the next except as explained below.

REPORTING REQUIREMENT	REQUIRED	CHECK IF ATTACHED
Interim Financial Statements	Monthly within 30 days	
Interim Financial Statements	Quarterly within 45 days	
Audited Financial Statements	FYE within 90 days	

ACCOUNTS OF BORROWER AND ITS SUBSIDIARIES AND AFFILIATES

The undersigned hereby also confirms the below disclosed accounts represent all depository accounts and securities accounts presently open in the name of each Borrower or Borrower Subsidiary/Affiliate, as applicable.

Each new account that has been opened since delivery of the previous Compliance Certificate is designated below with a "*".

		Depository AC #	Financial Institution	Account Type (Depository/ Securities)	Last Month Ending Account Balance	Purpose of Account
BORROWER Name/Address:						
	1					
	2					
	3					
	4					
	5					
	6					
	7					
SUBSIDIARY / AFFILIATE Name/Address						
	1					
	2					
	3					
	4					
	5					
	6					
	7					

FINANCIAL COVENANTS

Financial Covenant	**Required Level**	**Actual Level**	**In Compliance? (Y/N)**
Minimum Unrestricted Cash Covenant	[_____]	$_____	

Conditional Performance Covenant	[_____]	[____]	

INSURANCE POLICIES OF BORROWER AND ITS SUBSIDIARIES

[The undersigned hereby also confirms that since delivery of the previous Compliance Certificate, neither Borrower nor any of its Subsidiaries has entered into or amended any insurance policy required pursuant to Section 6.1 of the Loan Agreement.][1]

[Since delivery of the previous Compliance Certificate, Borrower and/or one or more of its Subsidiaries have entered into new, or amended existing, insurance policies required pursuant to Section 6.1 of the Loan Agreement. Attached hereto are copies of such new or amended insurance policies and updated insurance certificates with respect to such policies, as required to be delivered pursuant to Section 6.2 of the Loan Agreement.][2]

[Current Company IP]

[The following claim(s) have been made to Borrower in writing that material part(s) of the Current Company IP infringes or violates the rights of a third party:

[ ]][3]

[The following Specified Dispute(s) have been alleged or threatened in writing to Borrower or any of its Subsidiaries:
[ ]][4]

EXCLUDED SUBSIDIARIES

The undersigned hereby also confirms the above disclosed accounts represent all cash and cash equivalents held by each Excluded Subsidiary, as applicable.

Does any single Excluded Subsidiary hold cash and cash equivalents greater than $1,000,000 in the aggregate? ____ Yes (not in compliance) ____ No (in compliance)

---

[1] Include if neither Borrower nor any of its Subsidiaries has entered into or amended any insurance policies since delivery of the previous Compliance Certificate.
[2] Include if Borrower or any of its Subsidiaries has entered into or amended any insurance policies since delivery of the previous Compliance Certificate.
[3] Include if any claim(s) have been made to any Borrower in writing that any material part of the Current Company IP violates the rights of any third party.
[4] Include if any Specified Dispute(s) have been alleged or threatened in writing, in each case challenging the legality, validity, enforceability or ownership of any Current Company IP, in each case that would have a material adverse effect on the Products.

If yes: Please list such Subsidiaries and indicate whether a Joinder will be provided for such Subsidiary: [●]

Is the aggregate amount of cash and cash equivalents held by all Excluded Subsidiaries less than or equal to $1,500,000? ____ Yes (in compliance) ____ No (not in compliance)

[MSC SUBSIDIARY AND MSC INVESTMENT CONDITIONS

Does the MSC Subsidiary have any assets or liabilities?	____ Yes
	____ No
Is the aggregate amount of the consolidated cash of Borrower and its Subsidiaries equal to or less than $150,000,000?	____ Yes (please complete below chart)
	____ No

MSC INVESTMENT CONDITIONS

(1) Aggregate amount of Borrower's cash and cash equivalents held in accounts subject to an Account Control Agreement:	$[●]
(2) Aggregate amount of outstanding Secured Obligations (including any Prepayment Charge and End of Term Charge if outstanding Term Loan Advances were prepaid at this time):	$[●]
(3) Aggregate amount of the consolidated Cash of Borrower and its Subsidiaries (other than Cash held in Excluded Accounts):	$[●]
(4) Amount of the lesser of line (2) and line (3):	$[●]
Is line (1) equal to or greater than line (4)?	_____ Yes (in compliance) _____ No (not in compliance)]

Very Truly Yours,

REPLIMUNE GROUP, INC.

By: _____

Name: _____

Its: _____

EXHIBIT F

FORM OF JOINDER AGREEMENT

This Joinder Agreement (the "Joinder Agreement") is made and dated as of [ ], 20[ ], and is entered into by and between _____, a _____ [corporation] ("Subsidiary"), and HERCULES CAPITAL, INC., a Maryland corporation (as "Agent").

RECITALS

A. Subsidiary's Affiliate, Replimune Group, Inc., a Delaware corporation ("Company"), has entered into that certain Loan and Security Agreement dated October 6, 2022, with the several banks and other financial institutions or entities from time to time party thereto as lender (collectively, the "Lenders"), each other Borrower that is party thereto, and the Agent, as such agreement may be amended (the "Loan Agreement"), together with the other agreements executed and delivered in connection therewith;

B. Subsidiary acknowledges and agrees that it will benefit both directly and indirectly from Company's execution of the Loan Agreement and the other agreements executed and delivered in connection therewith;

AGREEMENT

NOW THEREFORE, Subsidiary and Agent agree as follows:

1. The recitals set forth above are incorporated into and made part of this Joinder Agreement. Capitalized terms not defined herein shall have the meaning provided in the Loan Agreement.

2. By signing this Joinder Agreement, Subsidiary shall be bound by the terms and conditions of the Loan Agreement the same as if it were a Borrower (as defined in the Loan Agreement) under the Loan Agreement, mutatis mutandis, provided however, that (a) with respect to (i) Section 5.1 of the Loan Agreement, Subsidiary represents that it is an entity duly organized, legally existing and in good standing under the laws of [ ], (b) neither Agent nor the Lenders shall have any duties, responsibilities or obligations to Subsidiary arising under or related to the Loan Agreement or the other Loan Documents, (c) that if Subsidiary is covered by Company's insurance, Subsidiary shall not be required to maintain separate insurance or comply with the provisions of Sections 6.1 and 6.2 of the Loan Agreement, and (d) that as long as Company satisfies the requirements of Section 7.1 of the Loan Agreement, Subsidiary shall not have to provide Agent separate Financial Statements. To the extent that Agent or the Lenders has any duties, responsibilities or obligations arising under or related to the Loan Agreement or the other Loan Documents, those duties, responsibilities or obligations shall flow only to Company and not to Subsidiary or any other Person or entity. By way of example (and not an exclusive list): (i) Agent's providing notice to Company in accordance with the Loan Agreement or as otherwise agreed among Company, Agent and the Lenders shall be deemed provided to Subsidiary; (ii) a Lender's providing an Advance to Company shall

be deemed an Advance to Subsidiary; and (iii) Subsidiary shall have no right to request an Advance or make any other demand on the Lenders.

3. [Subsidiary agrees not to certificate its equity securities without Agent's prior written consent, which consent may be conditioned on the delivery of such equity securities to Agent in order to perfect Agent's security interest in such equity securities.][5]

4. Subsidiary acknowledges that it benefits, both directly and indirectly, from the Loan Agreement, and hereby waives, for itself and on behalf on any and all successors in interest (including without limitation any assignee for the benefit of creditors, receiver, bankruptcy trustee or itself as debtor-in-possession under any bankruptcy proceeding) to the fullest extent provided by law, any and all claims, rights or defenses to the enforcement of this Joinder Agreement on the basis that (a) it failed to receive adequate consideration for the execution and delivery of this Joinder Agreement or (b) its obligations under this Joinder Agreement are avoidable as a fraudulent conveyance.

5. As security for the prompt, complete and indefeasible payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, Subsidiary grants to Agent a security interest in all of Subsidiary's right, title, and interest in and to the Collateral.

SUBSIDIARY:

_____

By:
Name:
Title:

Address:

Telephone: _____
email: _____

AGENT:

HERCULES CAPITAL, INC.

By: _____
Name: _____
Title: _____

Address:
400 Hamilton Ave., Suite 310
Palo Alto, CA 94301
email: legal@htgc.com
Telephone: 650-289-3060

[5] Only include if Subsidiary's equity interests are not certificated as of the joinder date.

EXHIBIT G

ACH DEBIT AUTHORIZATION AGREEMENT

[Hercules Capital, Inc.]
[ ]
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

Re: Loan and Security Agreement dated October 6, 2022 (the "Agreement") by and among Replimune Group, Inc., a Delaware corporation ("Borrower"), and certain of its Subsidiaries party thereto as a borrower, Hercules Capital, Inc., as agent ("Company"), and the lenders party thereto (collectively, the "Lenders")

In connection with the above referenced Agreement, Borrower hereby authorizes the Company to initiate debit entries for (i) the periodic payments due under the Agreement and (ii) out-of-pocket legal fees and costs incurred by Agent or the Lenders pursuant to Section 11.12 of the Agreement to Borrower's account indicated below. Borrower authorizes the depository institution named below to debit to such account.

[IF FILED PUBLICLY, ACCOUNT INFO REDACTED FOR SECURITY PURPOSES]

DEPOSITORY NAME	BRANCH
CITY	STATE AND ZIP CODE
TRANSIT/ABA NUMBER	ACCOUNT NUMBER

This authority will remain in full force and effect so long as any amounts are due under the Agreement.

REPLIMUNE GROUP, INC.

By: _____

Name: _____

Date: _____

EXHIBIT H-1

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Loan and Security Agreement dated as of October 6, 2022 (as amended, supplemented or otherwise modified from time to time, the "Loan Agreement") by and among Replimune Group, Inc., a Delaware corporation, and certain of its Subsidiaries party thereto as a borrower (collectively, "Borrower"), the several banks and other financial institutions or entities from time to time parties thereto (collectively, referred to as the "Lenders"), and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lenders (in such capacity, the "Agent").

Pursuant to the provisions of Addendum 1 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the Loan(s) (as well as any promissory note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) it is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a "ten percent shareholder" of Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a "controlled foreign corporation" related to Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Agent and Borrower with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform Borrower and the Agent, and (2) the undersigned shall have at all times furnished Borrower and the Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

Date: _____, 20___ [NAME OF LENDER]

By: _____
Name: _____
Title: _____

EXHIBIT H-2

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Not Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Loan and Security Agreement dated as of October 6, 2022 (as amended, supplemented or otherwise modified from time to time, the "Loan Agreement") by and among Replimune Group, Inc., a Delaware corporation, and certain of its Subsidiaries party thereto as a borrower (collectively, "Borrower"), the several banks and other financial institutions or entities from time to time parties thereto (collectively, referred to as the "Lenders"), and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lenders (in such capacity, the "Agent").

Pursuant to the provisions of Addendum 1 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record and beneficial owner of the participation in respect of which it is providing this certificate, (ii) it is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, (iii) it is not a "ten percent shareholder" of Borrower within the meaning of Section 871(h)(3)(B) of the Code and (iv) it is not a "controlled foreign corporation" related to Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with a certificate of its non-U.S. Person status on IRS Form W-8BEN or IRS Form W-8BEN-E. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform such Lender in writing, and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

Date: _____, 20___

[NAME OF PARTICIPANT]

By: _____
Name: _____
Title: _____

EXHIBIT H-3

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Participants That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Loan and Security Agreement dated as of October 6, 2022 (as amended, supplemented or otherwise modified from time to time, the "Loan Agreement") by and among Replimune Group, Inc., a Delaware corporation, and certain of its Subsidiaries party thereto as a borrower (collectively, "Borrower"), the several banks and other financial institutions or entities from time to time parties thereto (collectively, referred to as the "Lenders"), and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lenders (in such capacity, the "Agent").

Pursuant to the provisions of Addendum 1 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the participation in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such participation, (iii) with respect to such participation, neither the undersigned nor any of its direct or indirect partners/members is a "bank" extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a "ten percent shareholder" of Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a "controlled foreign corporation" related to Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished its participating Lender with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform such Lender and (2) the undersigned shall have at all times furnished such Lender with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

Date: _____, 20___

[NAME OF PARTICIPANT]

By: _____
Name: _____
Title: _____

EXHIBIT H-4

FORM OF U.S. TAX COMPLIANCE CERTIFICATE

(For Foreign Lenders That Are Partnerships For U.S. Federal Income Tax Purposes)

Reference is hereby made to the Loan and Security Agreement dated as of October 6, 2022 (as amended, supplemented or otherwise modified from time to time, the "Loan Agreement") by and among Replimune Group, Inc., a Delaware corporation, and certain of its Subsidiaries party thereto as a borrower (collectively, "Borrower"), the several banks and other financial institutions or entities from time to time parties thereto (collectively, referred to as the "Lenders"), and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for itself and the Lenders (in such capacity, the "Agent").

Pursuant to the provisions of Addendum 1 of the Loan Agreement, the undersigned hereby certifies that (i) it is the sole record owner of the Loan(s) (as well as any promissory note(s) evidencing such Loan(s)) in respect of which it is providing this certificate, (ii) its direct or indirect partners/members are the sole beneficial owners of such Loan(s) (as well as any promissory note(s) evidencing such Loan(s)), (iii) with respect to the extension of credit pursuant to this Loan Agreement or any other Loan Document, neither the undersigned nor any of its direct or indirect partners/members is a "bank" extending credit pursuant to a loan agreement entered into in the ordinary course of its trade or business within the meaning of Section 881(c)(3)(A) of the Code, (iv) none of its direct or indirect partners/members is a "ten percent shareholder" of Borrower within the meaning of Section 871(h)(3)(B) of the Code and (v) none of its direct or indirect partners/members is a "controlled foreign corporation" related to Borrower as described in Section 881(c)(3)(C) of the Code.

The undersigned has furnished the Agent and Borrower with IRS Form W-8IMY accompanied by one of the following forms from each of its partners/members that is claiming the portfolio interest exemption: (i) an IRS Form W-8BEN or IRS Form W-8BEN-E or (ii) an IRS Form W-8IMY accompanied by an IRS Form W-8BEN or IRS Form W-8BEN-E from each of such partner's/member's beneficial owners that is claiming the portfolio interest exemption. By executing this certificate, the undersigned agrees that (1) if the information provided in this certificate changes, the undersigned shall promptly so inform Borrower and the Agent, and (2) the undersigned shall have at all times furnished Borrower and the Agent with a properly completed and currently effective certificate in either the calendar year in which each payment is to be made to the undersigned, or in either of the two calendar years preceding such payments.

Unless otherwise defined herein, terms defined in the Loan Agreement and used herein shall have the meanings given to them in the Loan Agreement.

Date: _____, 20___

[NAME OF LENDER]

By: _____

Name: _____

Title: _____

SCHEDULE 1.1

COMMITMENTS

LENDERS	TRANCHE 1	TRANCHE 2	TRANCHE 3	TRANCHE 4	TRANCHE 5	TRANCHE 6*	TOTAL COMMITMENTS
Hercules Capital, Inc.	$52,200,000.00	$13,050,000.00	$21,750,000.00	$30,450,000.00	$34,800,000.00	$25,000,000.00*	$177,250,000.00
Hercules Private Global Venture Growth Fund I L.P.	$7,800,000.00	$1,950,000.00	$3,250,000.00	$4,550,000.00	$5,200,000.00	--	$22,750,000.00
	$60,000,000.00	$15,000,000.00	$25,000,000.00	$35,000,000.00	$40,000,000.00	$25,000,000.00*	$200,000,000.00

*Funding of Tranche 6 is conditioned on approval by Lender's investment committee in its sole and unfettered discretion.

LENDERS	Treaty Passport scheme reference number and jurisdiction of tax residence (if applicable)
Hercules Capital, Inc.	13/H/376642/DTTP USA
Hercules Private Global Venture Growth Fund I L.P.	--

SCHEDULE 1

SUBSIDIARIES

Parent holds:

Replimune, Inc. – 100% ownership
Replimune Securities Corporation – 100% ownership
Replimune Limited – 100% ownership

Replimune Limited holds:

Replimune (Ireland) Limited – 100% ownership

SCHEDULE 1A

EXISTING PERMITTED INDEBTEDNESS

Borrower	Third Party	Amount	Purpose
Replimune, Inc.	C T Corporation System	$35,832.00	Laptops and docking stations
Replimune, Inc.	C T Corporation System	$99,015.36	Laptops and docking stations

SCHEDULE 1B

EXISTING PERMITTED INVESTMENTS

None.

SCHEDULE 1C

EXISTING PERMITTED LIENS

Debtor	Juris. / Lien Type Searched	Secured Party	Original File Number	Original File Date	Collateral
Replimune, Inc.	Delaware	C T Corporation System	20220406447	1/17/2022	Laptops and docking stations
Replimune, Inc.	Delaware	C T Corporation System	20223779113	5/4/2022	Laptops and docking stations

SCHEDULE 4.4

POST-CLOSING DELIVERABLES

1. Within thirty (30) days of the Closing Date (or such later date to which the Agent may agree in its sole discretion), Borrower shall deliver to Agent insurance endorsements in accordance with the requirements of Section 6.2 of this Agreement.

2. Within thirty (30) days of the Closing Date (or such later date to which the Agent may agree in its sole discretion), Borrower shall obtain a duly executed and delivered landlord waiver agreement, in form and substance reasonably satisfactory to Agent, for Borrower's leased property located at 500 Unicorn Park Dr., 3rd Floor, Woburn, MA 01801.

3. Within thirty (30) days of the Closing Date (or such later date to which the Agent may agree in its sole discretion), Borrower shall obtain a duly executed and delivered landlord waiver agreement, in form and substance reasonably satisfactory to Agent, for Borrower's leased property located at 33 NY Avenue, Framingham, MA 01701.

4. By no later than one (1) Business Day after the Closing Date (or such later date to which the Agent may agree in its sole discretion), Borrower shall have delivered to Agent (i) duly executed Account Control Agreements, in form and substance reasonably satisfactory to Agent, in respect of the Borrower's Deposit Accounts set forth in Exhibit D hereto (other than Excluded Accounts) and (ii) a legal opinion of Borrower's U.S. counsel in form and substance reasonably acceptable to Agent.

SCHEDULE 5.3

CONSENTS, ETC.

Certain UK insurance assignments under the English Debenture require consent and may not be obtained prior to the Closing Date.

SCHEDULE 5.8

TAX MATTERS

None.

SCHEDULE 5.9

CURRENT COMPANY IP CLAIMS

Section 5.9, subsection (i): certain Current Company IP is being challenged for validity as follows:

EP Oppositions of Company IP:

- EP 3400293
- EP 3400291

US Patent Trial and Appeal Board (PTAB) proceedings of Company IP:

- US 10,947,513

SCHEDULE 5.10(a)

CURRENT COMPANY IP

Section 5.10(a), first sentence: See Exhibit A to the Perfection Certificate

Section 5.10(a), subsection (i)(B): certain Current Company IP is being challenged for validity as follows: See disclosure on Schedule 5.9.

SCHEDULE 5.10(f)

Section 5.10(f), subsection (ii): certain Current Company IP is being challenged for validity as follows: See disclosure on Schedule 5.9.

SCHEDULE 5.10(g)

CURRENT COMPANY IP SPECIAL DISPUTES

None.

SCHEDULE 5.10(i)

THIRD PARTY IP CLAIMS

Section 5.10(i) subsection (ii): certain Current Company IP is being challenged for validity as follows: See disclosure on Schedule 5.9.

SCHEDULE 5.10(j)

THIRD PARTY IP

None.

SCHEDULE 5.10(k)

RIGHTS TO USE CURRENT COMPANY IP

None.

SCHEDULE 5.10(l)

CURRENT COMPANY IP VIOLATION

None.

SCHEDULE 5.10(o)

CURRENT COMPANY IP

None.

SCHEDULE 5.11

BORROWER PRODUCTS

Section 5.11, first sentence: certain Current Company IP is being challenged for validity as follows: See disclosure on Schedule 5.9.

SCHEDULE 5.14

CAPITALIZATION

WHOLLY OWNED SUBSIDIARIES OF PARENT:
Replimune, Inc.
Replimune Securities Corporation
Replimune Limited

WHOLLY OWNED SUBSIDIARIES OF REPLIMUNE LIMITED:
Replimune (Ireland) Limited

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, Philip Astley-Sparke, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Replimune Group, 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: November 3, 2022

By: /s/ Philip Astley-Sparke

Philip Astley-Sparke
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, Jean Franchi, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Replimune Group, 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: November 3, 2022

By: /s/ Jean Franchi
Jean Franchi
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 on Form 10-Q of Replimune Group, Inc. (the "Company") for the quarter ended September 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Philip Astley-Sparke, Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 3, 2022

By: /s/ Philip Astley-Sparke
Philip Astley-Sparke
Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

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

In connection with the Quarterly Report on Form 10-Q of Replimune Group, Inc. (the "Company") for the quarter ended September 30, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Jean Franchi, Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 3, 2022

By: /s/ Jean Franchi
Jean Franchi
Chief Financial Officer
(Principal Financial Officer)