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

FORM 10-Q

(Mark One)

X **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended March 31, 2021

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: 001-40323

Recursion Pharmaceuticals, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**46-4099738**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

41 S Rio Grande Street
Salt Lake City, UT 84101
(Address of principal executive offices) (Zip code)
(385) 269 - 0203
(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
Class A Common Stock, par value $0.00001	RXRX	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 X

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 X No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or 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	☐	Non-accelerated filer	x
Accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	x

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 X

As of April 30, 2021, there were 168,320,745 of the registrant's Class A and B common stock, par value $0.00001 per share, outstanding.

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SUMMARY RISK FACTORS

Our business is subject to numerous risks and uncertainties that you should consider before investing in our company. These risks are described more fully in the section titled “Risk Factors” in this Quarterly Report on Form 10-Q. These risks include, but are not limited to, the following:

- We are a clinical-stage biotechnology company with a limited operating history.
- We have incurred significant operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.
- Our mission is broad and expensive to achieve and we will need to raise substantial additional funding.
- We have no products approved for commercial sale and have not generated any revenue from product sales.
- We or our current and future collaborators may never successfully develop and commercialize drug products, which would negatively affect our results of operation and our ability to continue our business operations.
- Our quarterly and annual operating results may fluctuate significantly in the future due to a variety of factors, many of which are outside of our control and may be difficult to predict.
- Our approach to drug discovery is unique and may not lead to successful drug products, for reasons including but not limited to potential challenges identifying mechanisms of action for our candidates.
- Our drug candidates are in preclinical or clinical development, which are lengthy and expensive processes with uncertain outcomes and the potential for substantial delays.
- Although we intend to explore other therapeutic opportunities, in addition to the drug candidates that we are currently developing, we may fail to identify viable new drug candidates for clinical development for a number of reasons. If we fail to identify additional viable potential drug candidates, our business could be materially harmed.
- Our business and operations would suffer in the event of computer system failures, cyber-attacks, or deficiencies in our cybersecurity or the cybersecurity of third parties, suppliers, or service providers.
- If we are not able to develop new solutions and enhancements to our platform that keep pace with technological developments, our business and results of operations would be harmed.
- Defects or disruptions in our platform could result in diminishing our value and prospects.
- A pandemic, epidemic, or outbreak of an infectious disease, such as COVID-19, or other force majeure events, may materially and adversely affect our business and our financial results and could cause a disruption to the development of our drug candidates.
- If we fail to sufficiently manage and improve our technical hardware infrastructure we may experience errors, delays and other performance problems.
- We are subject to regulatory and operational risks associated with the physical and digital infrastructure at both our internal facilities and those of our external service providers and suppliers.
- We may seek to establish additional collaborations for clinical development or commercialization of our drug candidates, and, if we are not able to establish them on commercially reasonable terms, or at all, we may have to alter our development and commercialization plans.
- If we are unable to adequately protect and enforce our intellectual property and proprietary technology or obtain and maintain patent protection for our technology and products, or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired.
- If we are unable to protect the confidentiality of our trade secrets and know-how, our business and competitive position may be harmed.
- If we fail to comply with our obligations in the agreements under which we collaborate with and/or license intellectual property rights from third parties, or otherwise experience disruptions to our business relationships with our collaborators or licensors, we could lose rights that are important to our business.

Special Note Regarding Forward-Looking Information

This report contains “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. All statements other than statements of historical facts contained in this Quarterly Report, including statements regarding our future results of operations and financial position, business strategy, development plans, planned preclinical studies, and clinical trials, future results of clinical trials, expected research and development costs, regulatory strategy, timing, and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “would,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplate,” “believe,” “estimate,”

“predict,” “potential,” or “continue” or the negative of these terms or other similar expressions. Forward-looking statements contained in this report include, but are not limited to, statements about:

- *our research and development programs and the initiation, timing, progress, results, and cost of our current and future preclinical and clinical studies, including statements regarding design of, and the timing of initiation and completion of, studies or trials and related preparatory work, the period during which the results of the trials will become available;*
- *the ability of our clinical trials to demonstrate safety and efficacy of our drug candidates, and other positive results;*
- *the ability and willingness of our third-party strategic collaborators to continue research and development activities relating to our development candidates and investigational medicines;*
- *future agreements with third parties in connection with the commercialization of our investigational medicines and any other approved product;*
- *the timing, scope, and likelihood of regulatory filings and approvals, including timing of Investigational New Drug applications and final approval by the U.S. Food and Drug Administration, or FDA, of our current drug candidates and any other future drug candidates, including our ability to maintain any such approvals;*
- *the timing, scope, or likelihood of foreign regulatory filings and approvals, including our ability to maintain any such approvals;*
- *the size of the market opportunity for our drug candidates, including our estimates of the number of patients who suffer from the diseases we are targeting;*
- *our ability to identify viable new drug candidates for clinical development and the accelerating rate at which we expect to identify such candidates, whether through an inferential approach or otherwise;*
- *our expectation that the assets that will drive the most value for us are those that we will identify in the future using our datasets and tools;*
- *our ability to develop and advance our current drug candidates and programs into, and successfully complete, clinical studies;*
- *our ability to reduce the time or cost or increase the likelihood of success of our research and development relative to the traditional drug discovery paradigm;*
- *our ability to improve, and the rate of improvement in, our infrastructure, datasets, biology, and technology tools, and drug discovery platform, or to realize benefits from such improvements;*
- *our expectations related to the performance and benefits of our BioHive-1 supercomputer;*
- *our ability to realize a return on our investment of resources and cash in our drug discovery collaborations;*
- *our ability to scale like a technology company and to add more programs to our pipeline each year than in the prior;*
- *our ability to successfully compete in a highly competitive market;*
- *our manufacturing, commercialization, and marketing capabilities and strategy;*
- *our plans relating to commercializing our drug candidates, if approved, including the geographic areas of focus and sales strategy;*
- *our expectations regarding the approval and use of our drug candidates in combination with other drugs;*
- *the rate and degree of market acceptance and clinical utility of our current drug candidates and other drug candidates we may develop;*
- *our competitive position and the success of competing therapies that are or may become available;*
- *our estimates of the number of patients that we will enroll in our clinical trials and the timing of their enrollment;*
- *the beneficial characteristics, safety, efficacy, and therapeutic effects of our drug candidates;*
- *our plans relating to the further development of our drug candidates, including additional indications we may pursue;*
- *our ability to adequately protect and enforce our intellectual property and proprietary technology, including the scope of protection we are able to establish and maintain for intellectual property rights covering our current drug candidates and other drug candidates we may develop, obtaining patent protection, the extensions of existing patent terms where available, the validity of intellectual property rights held by third parties, the protection of our trade secrets, and our ability not to infringe, misappropriate or otherwise violate any third-party intellectual property rights;*
- *the impact of any current or future intellectual property litigation and our ability to defend against claims of infringement, misappropriation, or other violations of any third-party intellectual property rights;*
- *our ability to keep pace with new technological developments;*
- *our ability to utilize third-party open source software and cloud-based infrastructure, on which we are dependent;*
- *the adequacy of our insurance policies and the scope of their coverage;*

- *the potential impact of a pandemic, epidemic, or outbreak of an infectious disease, such as COVID-19, or natural disaster, and the effect of such outbreak or natural disaster on our business and financial results;*
- *our ability to maintain our technical operations infrastructure to avoid errors, delays, or cybersecurity breaches;*
- *our continued reliance on third parties to conduct additional clinical trials of our drug candidates, and for the manufacture of our drug candidates for preclinical studies and clinical trials;*
- *our ability to obtain, and negotiate favorable terms of, any collaboration, licensing or other arrangements that may be necessary or desirable to research, develop, manufacture, or commercialize our platform and drug candidates;*
- *the pricing and reimbursement of our current drug candidates and other drug candidates we may develop, if approved;*
- *our estimates regarding expenses, future revenue, capital requirements, and needs for additional financing*
- *our financial performance;*
- *the period over which we estimate our existing cash and cash equivalents will be sufficient to fund our future operating expenses and capital expenditure requirements;*
- *our ability to raise substantial additional funding;*
- *the impact of current and future laws and regulations, and our ability to comply with all regulations that we are, or may become, subject to;*
- *the need to hire additional personnel and our ability to attract and retain such personnel;*
- *the impact of any current or future litigation, which may arise during the ordinary course of business and be costly to defend;*
- *our expectations regarding the period during which we will qualify as an emerging growth company under the JOBS Act;*
- *our anticipated use of our existing resources and the net proceeds from this offering; and*
- *other risks and uncertainties, including those listed under the caption "Risk Factors."*

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate, and financial trends that we believe may affect our business, financial condition, results of operations, and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of this report and are subject to a number of risks, uncertainties and assumptions described in the section titled "Risk Factors" and elsewhere in this report. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein until after we distribute this report, whether as a result of any new information, future events, or otherwise.

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

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements.

Recursion Pharmaceuticals, Inc.
Condensed Consolidated Balance Sheets (unaudited)
(in thousands, except share and per share amounts)

	March 31, 2021	December 31, 2020
Assets		
Current assets		
Cash and cash equivalents	$ 214,088	$ 262,126
Restricted cash	5,042	5,041
Accounts receivable	71	156
Other current assets	2,621	2,155
Total current assets	221,822	269,478
Property and equipment, net	44,642	25,967
Intangible assets, net	2,414	2,490
Other non-current assets	3,065	650
Total assets	$ 271,943	$ 298,585
Liabilities, convertible preferred stock and stockholders' deficit		
Current liabilities		
Accounts payable	$ 3,125	$ 1,074
Accrued expenses and other liabilities	11,085	10,485
Current portion of unearned revenue	10,000	10,000
Current portion of notes payable	2,145	1,073
Current portion of lease incentive obligation	499	467
Total current liabilities	26,854	23,099
Deferred rent	2,750	2,674
Unearned revenue, net of current portion	14,167	16,667
Notes payable, net of current portion	10,339	11,414
Lease incentive obligation, net of current portion	2,552	2,708
Total liabilities	56,662	56,562
Commitments and contingencies (Note 6)		
Convertible preferred stock (series A, A-1, B, C, and D), $0.00001 par value; *121,434,713 shares authorized as of March 31, 2021 and December 31, 2020; 112,088,065 shares issued and outstanding as of March 31, 2021 and December 31, 2020; Liquidation preference of $450,850 as of March 31, 2021 and December 31, 2020*	448,312	448,312
Stockholders' deficit		
Common stock, $0.00001 par value; *188,400,000 shares authorized as of March 31, 2021 and December 31, 2020; 24,036,725 and 22,314,685 shares issued and outstanding as of March 31, 2021 and December 31, 2020, respectively*	—	—
Additional paid-in capital	11,287	7,312
Accumulated deficit	(244,318)	(213,601)
Total stockholders' deficit	(233,031)	(206,289)
Total liabilities, convertible preferred stock and stockholders' deficit	$ 271,943	$ 298,585

See the accompanying notes to these condensed consolidated financial statements.

Recursion Pharmaceuticals, Inc.
Condensed Consolidated Statements of Operations and Comprehensive Loss (unaudited)
(in thousands, except share and per share amounts)

	Three months ended March 31,	
	2021	**2020**
Revenue		
Grant revenue	$ 62	$ 60
Operating revenue	2,500	—
Total revenue	2,562	60
Operating expenses		
Research and development	24,109	12,842
General and administrative	8,937	5,561
Total operating expenses	33,046	18,403
Loss from operations	(30,484)	(18,343)
Other loss, net	(233)	(81)
Net loss and comprehensive loss	$ (30,717)	$ (18,424)
Per share data		
Net loss per share, basic and diluted	$ (1.33)	$ (0.85)
Weighted average shares of common stock, basic and diluted	23,035,623	21,639,891

See the accompanying notes to these condensed consolidated financial statements.

Recursion Pharmaceuticals, Inc.
Condensed Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit (unaudited)
(in thousands, except share amounts)

	Convertible Preferred Stock		Common Stock		Additional Paid-in-Capital	Accumulated Deficit	Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance as of December 31, 2020	112,088,065	$ 448,312	22,314,685	$ —	$ 7,312	$ (213,601)	$ (206,289)
Net loss	—	—	—	—	—	(30,717)	(30,717)
Stock option exercises and other	—	—	1,722,040	—	2,154	—	2,154
Stock-based compensation	—	—	—	—	1,821	—	1,821
Balance as of March 31, 2021	112,088,065	$ 448,312	24,036,725	$ —	$ 11,287	$ (244,318)	$ (233,031)

	Convertible Preferred Stock		Common Stock		Additional Paid-in-Capital	Accumulated Deficit	Stockholders' Deficit
	Shares	Amount	Shares	Amount			
Balance as of December 31, 2019	75,189,517	$ 201,109	21,637,609	$ —	$ 2,330	$ (126,595)	$ (124,265)
Net loss	—	—	—	—	—	(18,424)	(18,424)
Stock option exercises	—	—	14,668	—	16	—	16
Stock-based compensation	—	—	—	—	1,286	—	1,286
Balance as of March 31, 2020	75,189,517	$ 201,109	21,652,277	$ —	$ 3,632	$ (145,019)	$ (141,387)

See the accompanying notes to these condensed consolidated financial statements.

Recursion Pharmaceuticals, Inc.
Condensed Consolidated Statements of Cash Flows (unaudited)
(in thousands)

	Three months ended March 31,	
	2021	**2020**
Cash flows from operating activities		
Net loss	$ (30,717)	$ (18,424)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,402	937
Stock-based compensation	1,821	1,265
Other, net	101	22
Changes in operating assets and liabilities:		
Accounts receivable	85	82
Other assets	(2,915)	(132)
Unearned revenue	(2,500)	—
Accounts payable	2,051	625
Accrued development expense	(1,216)	(400)
Accrued expenses, deferred rent and other current liabilities	1,133	(1,792)
Net cash used in operating activities	(30,755)	(17,817)
Cash flows from investing activities		
Purchases of property and equipment	(19,416)	(684)
Net cash used in investing activities	(19,416)	(684)
Cash flows from financing activities		
Proceeds from exercise of stock options	2,154	16
Repayment of long-term debt	(20)	(19)
Proceeds from convertible notes	—	6,000
Net cash provided by financing activities	2,134	5,997
Net change in cash, cash equivalents and restricted cash	(48,037)	(12,504)
Cash, cash equivalents and restricted cash, beginning of period	267,167	75,171
Cash, cash equivalents and restricted cash, end of period	$ 219,130	$ 62,667
Supplemental disclosure of non—cash investing and financing information		
Accrued property and equipment	$ 705	—
Deferred issuance costs	2,997	—
Supplemental disclosure of cash flow information		
Cash paid for interest	$ 254	$ 306

See the accompanying notes to these condensed consolidated financial statements.

Note 1. Description of the Business

Recursion Pharmaceuticals, Inc. (Recursion, the Company, or we) was originally formed as a limited liability company on November 4, 2013 under the name Recursion Pharmaceutical, LLC. In September 2016, we converted to a Delaware corporation and subsequently changed our name to Recursion Pharmaceuticals, Inc.

Recursion is a biotechnology company that combines automation, artificial intelligence, machine learning, in vivo validation capabilities and a highly cross-functional team to discover novel medicines that expand our collective understanding of biology. Recursion's rich, relatable database of biological images generated in-house on the Company's robotics platform enables advanced machine learning approaches to reveal drug candidates, mechanisms of action, novel chemistry, and potential toxicity, with the eventual goal of decoding biology and advancing new therapeutics that radically improve people's lives.

As of March 31, 2021, the Company had an accumulated deficit of $244.3 million. The Company expects to incur substantial operating losses in future periods and will require additional capital to advance its drug candidates. The Company does not expect to generate significant revenue until the Company successfully completes significant drug development milestones with its subsidiaries or in collaboration with third parties, which the Company expects will take a number of years. In order to commercialize its drug candidates, the Company or its partners need to complete clinical development and comply with comprehensive regulatory requirements. The Company is subject to a number of risks and uncertainties similar to those of other companies of the same size within the biotechnology industry, such as the uncertainty of clinical trial outcomes, uncertainty of additional funding, and a history of operating losses.

The Company has funded its operations to date primarily through the issuance of convertible preferred stock (see Note 7, "Convertible Preferred Stock" for additional information) and will likely be required to raise additional capital. As of March 31, 2021, the Company did not have any unconditional outstanding commitments for additional funding. If the Company is unable to access additional funds when needed, it may not be able to continue the development of its products or the Company could be required to delay, scale back or abandon some or all of its development programs and other operations. The Company's ability to access capital when needed is not assured and, if not achieved on a timely basis, could materially harm its business, financial condition and results of operations.

In April 2021, the Company completed an Initial Public Offering (IPO). See Note 16, "Subsequent Events" for additional details.

The Company believes that the net proceeds from the IPO, together with the Company's existing cash, and cash equivalents and borrowings available to us will be sufficient to fund the Company's operating expenses and capital expenditures for at least the next 12 months.

Note 2. Basis of Presentation

Basis of Presentation

The unaudited interim condensed consolidated financial statements of Recursion have been prepared pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (SEC). Accordingly, certain information and footnote disclosures normally included in annual financial statements prepared in accordance with generally accepted accounting principles in the United States (U.S. GAAP) have been condensed or omitted. These unaudited interim condensed consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements and notes for the year ended December 31, 2020 included in the Company's final prospectus dated as of April 15, 2021 and filed with the Securities and Exchange Commission (SEC) pursuant to Rule 424(b)(4) on April 16, 2020.

In April 2021, the Company completed a 1.5-for-1 forward stock split of common and convertible preferred stock. All shares presented within these condensed consolidated financial statements were adjusted to reflect the forward stock split for all periods presented. See Note 16, "Subsequent Events" for additional details.

It is management's opinion that these financial statements include all normal and recurring adjustments necessary for a fair presentation of the Company's financial position, operating results and cash flows. Revenues and net loss for any interim period are not necessarily indicative of future or annual results. Certain reclassifications were made to conform the prior period interim condensed consolidated financial statements to the current period presentation.

Emerging Growth Company

The Company is an emerging growth company (EGC), as defined by the Jumpstart Our Business Startups Act of 2012 (the JOBS act). The JOBS Act, exempts EGCs from being required to comply with new or revised financial accounting standards until private companies are required to comply. Recursion has elected to use the extended transition period for new or revised financial accounting standards. However, the Company may adopt certain new or revised accounting standards early. This may make comparisons of the Company's financial statements with other public companies difficult because of the potential differences in accounting standards used.

Recursion may remain an EGC until December 31, 2026 although if we: (1) become a "large accelerated filer;" (2) have annual gross revenues of $1.07 billion or more in any fiscal year; or (3) issue more than $1.0 billion of non-convertible debt over a three-year period, the Company would cease to be an EGC as of December 31 of the applicable year.

Recent Accounting Pronouncements

In February 2016, the Financial Accounting Standards Board (FASB) issued ASU 2016-02, Leases -Topic 842 (ASU 2016-02). Under Topic 842, the Company will be required to recognize a lease liability and a right-of-use asset for all leases (with the exception of short-term leases) at the commencement date of each lease. ASU 2016-02 is effective for annual and interim periods beginning on or after December 15, 2021 and early adoption is permitted. The Company must adopt the standard using the modified retrospective approach either: (1) as of the earliest period presented and through the comparative periods in the entity's financial statements or (2) as of the effective date of ASC 842, with a cumulative-effect adjustment to equity. The Company expects the adoption to materially increase assets and liabilities on the Condensed Consolidated Balance Sheets related to those leases classified as operating and not recognized on the Balance Sheets under current GAAP. The Company is continuing to evaluate the effect that ASU 2016-02 will have on its consolidated financial statements and related disclosures. The Company will adopt the new standard on January 1, 2022.

Note 3. Supplemental Financial Information

Property and Equipment

(in thousands)	March 31, 2021	December 31, 2020
Lab equipment	$ 21,234	$ 19,701
Leasehold improvements	13,792	13,792
Office equipment	18,994	1,075
Construction in progress	2,016	1,361
Property and equipment, gross	56,036	35,929
Less: Accumulated depreciation	(11,394)	(9,962)
Property and equipment, net	$ 44,642	$ 25,967

Depreciation expense on property and equipment was $1.4 million and $1.0 million during the three months ended March 31, 2021 and 2020, respectively.

For the three months ended March 31, 2021 the Company purchased a Dell EMC supercomputer, accessories and parts for $17.9 million. The purchase was classified as office equipment in the above table.

Accrued Expenses and Other Liabilities

(in thousands)	March 31, 2021	December 31, 2020
Accrued compensation	$ 1,800	$ 3,085
Accrued development expenses	1,073	2,289
Accrued administrative expenses	2,487	10
Accrued other expenses	5,725	5,101
Accrued expense and other liabilities	$ 11,085	$ 10,485

Interest Expense, net

	Three months ended March 31,	
(in thousands)	2021	2020
Interest expense	$ 249	$ 301
Interest income	(16)	(220)
Interest expense, net	$ 233	$ 81

Interest expense primarily relates to the Midcap and tenant improvement allowance notes (see Note 5, “Notes Payable” for additional details on the notes.) Interest expense is included in Other loss, net on the Condensed Consolidated Statements of Operations and Comprehensive Loss.

The Company capitalizes certain legal, professional, accounting and other third-party fees that are directly associated with debt and equity financings. There was $3.0 million of capitalized issuance costs on the Condensed Consolidated Balance Sheet on March 31, 2021 related to the planned IPO. See Note 16, “Subsequent Events” for additional information on the IPO.

Note 4. Goodwill and Intangible Assets

Goodwill

The carrying amount of Goodwill was $801 thousand as of March 31, 2021. There were no changes to the carrying amount of goodwill during the three months ended March 31, 2021. There was no Goodwill balance outstanding during the three months ended March 31, 2020. As of March 31, 2021, there were no reductions in Goodwill relating to impairment losses.

Intangible Assets, Net

The following table summarizes intangible assets:

	March 31, 2021			December 31, 2020		
(in thousands)	Gross carrying amount	Accumulated Amortization	Net carrying amount	Gross carrying amount	Accumulated Amortization	Net carrying amount
Definite-lived intangible asset	$ 911	$ (202)	$ 709	$ 911	$ (127)	$ 784
Indefinite-lived intangible asset	904	—	904	904	—	904

Amortization expense was $76 thousand during the three months ended March 31, 2021. There was no amortization expense during the three months ended March 31, 2020. Amortization expense was included in research and development in the Condensed Consolidated Statements of Operations and Comprehensive Loss. No definite-lived intangible asset impairment charges were recorded during the three months ended March 31, 2021. There were no intangible asset balances outstanding during the three months ended March 31, 2020.

The indefinite-lived intangible asset represents the Recursion domain name that the Company purchased. No indefinite-lived intangible asset impairment charges were recorded during the three months ended March 31, 2021.

Note 5. Notes Payable

Midcap Financial

In September 2019, the Company entered into a new Credit and Security Agreement with Midcap Financial Trust (Midcap), and the other lenders party thereto (the Midcap loan agreement). The Midcap loan agreement provides for a term loan facility that includes: i) an initial tranche of $11.9 million; and ii) a second tranche of up to $15.0 million, which if drawn would result in a maximum outstanding amount of $26.9 million. The Company used a portion of the proceeds from the initial tranche to fully repay a previously outstanding term loan, the Pacific Western Bank (Pacific) loan, for $11.2 million. Proceeds from the term loans may be used for general corporate purposes. As of March 31, 2021 and December 31, 2020, the outstanding principal balance under the Midcap loan agreement was $11.9 million.

Interest on the Midcap loan accrues on the principal amount outstanding at a floating per annum rate equal to the LIBOR rate (floor of 2.00%) plus 5.75% and is payable monthly in arrears. The Company is required to make interest-only payments from September 2019 to September 2021, and thereafter, 36 monthly principal payments of $330 thousand plus interest. The interest only period will be extended an additional 12 months under certain conditions.

The Company may voluntarily prepay the Midcap term loan, subject to certain minimum repayment requirements and prepayment fees. The Midcap term loan is subject to a mandatory prepayment under certain conditions.

The debt is secured against substantially all of the Company assets. The Midcap loan agreement includes standard affirmative and restrictive covenants, including covenants limiting the ability of the Company and its subsidiaries, among other things, to dispose of assets, grant certain licenses, make investments, merger or consummate acquisitions, incur debt, grant liens and make dividends or distributions, in each case subject to certain exceptions. The loan agreement also includes standard events of default, including, subject to grace periods in certain instances, payment defaults, breaches of covenants, breaches of representations and warranties, cross-defaults with certain other indebtedness, insolvency and bankruptcy defaults, change of control of the Company or any subsidiary, and a material adverse change in the business, operations or conditions of the Company. Upon the occurrence of an event of default, Midcap may declare all outstanding obligations immediately due and payable, increase the applicable interest rate by 2% and take such other actions as set forth in the Credit and Security Agreement. As of March 31, 2021 and 2020, the Company was in compliance with all debt covenants.

In 2019, the Company paid fees of approximately $298 thousand in connection with the origination of the Midcap loan agreement. These fees were deferred and recorded as a direct deduction from the carrying value of the loan payable and are being amortized to interest expense over the remaining term of the agreement.

Pacific Western

In May 2018, Pacific issued a standby letter of credit of $3.8 million for the benefit of the Company's landlord, securing certain Company obligations relating to tenant improvements. As of March 31, 2021 and December 31, 2020, the outstanding letter of credit was $3.8 million, for which the Company held $4.0 million as of March 31, 2021 and December 31, 2020, of restricted cash as collateral.

Convertible Notes

In March 2020, the Company issued convertible promissory notes for an aggregate principal amount of $6.0 million. Under certain conditions, the principal would convert to an amount of equity with a fair value that exceeded the amount of the notes' principal on the conversion date. This feature of the notes was accounted for separately at fair value as a derivative liability. Changes in the fair value of the derivative were recorded in other loss, net in the Condensed Consolidated Statements of Operations and Comprehensive Loss and were immaterial during the three months ended March 31, 2020.

In September 2020, these notes and additional notes that were issued in April 2020 converted to 1,203,231 shares of Series D Preferred Stock. Upon conversion of the notes, the Company recorded the $1.6 million fair value of the derivative liability as equity on the Condensed Consolidated Balance Sheet.

Notes Payable for Tenant Improvement Allowance

In 2018, the Company borrowed $992 thousand, which was available as part of the station 41 lease, from our landlord to be used on tenant improvements (see Note 6, “Commitments and Contingencies” for additional details.) Under the terms of the lease, the note will be repaid over a 10 year period at an 8% interest rate.
Notes payable for the Midcap loan agreement and tenant improvement allowance consisted of the following:

(in thousands)	March 31, 2021	December 31, 2020
Current portion of notes payable	$ 2,145	$ 1,073
Long-term portion of notes payable	10,522	11,615
Less: unamortized issuance costs	(183)	(201)
Notes payable, net	$ 12,484	$ 12,487

The following table presents information regarding the Company’s debt principal repayment obligations as of March 31, 2021:

(in thousands)	Amount
2021	$ 1,053
2022	4,052
2023	4,059
2024	3,059
2025	112
Thereafter	346
Total debt principal payments	$ 12,681

Note 6. Commitments and Contingencies

Lease Obligations

The Company has entered into various long-term real estate leases primarily related to office, research and development (R&D) and operating activities. For the three months ended March 31, 2021 and 2020, total rent expense was $1.3 million and $988 thousand, respectively. The following Komas, Station 41 and Milpitas leases are classified as operating leases.

Komas Lease
In August 2016, the Company entered a new facilities lease, with the right of use and payments beginning in January 2017. The term of the lease is 7 years. This lease includes provisions for escalating rent payments. Rent expense is recognized on a straight-line basis over the term of the lease. This lease included an allowance for tenant improvements. Tenant improvements were recorded as property and equipment and are being depreciated over the term of the lease. In conjunction with the allowance for tenant improvements, the Company recorded a lease incentive obligation of $847 thousand which is being amortized over the term of the lease as a reduction to rent expense. As of March 31, 2021, the related unamortized lease incentive obligation was $343 thousand.

Station 41 Lease
In August 2017, the Company entered a new facilities lease, with the right of use beginning in December 2017 and payments beginning in June 2018. The term of the lease is 10 years, with one five-year renewal option exercisable by the Company. This lease includes provisions for escalating rent payments. Rent expense is recognized straight-

line over the term of the lease. This lease included an allowance for tenant improvements of $4.0 million, the full balance of which was drawn in 2017. Tenant improvements were recorded as property and equipment and are being depreciated over the remaining term of the lease. In conjunction with the allowance for tenant improvements, the Company recorded a leasehold obligation, which is being amortized over the term of the lease as a reduction to rent expense. As of March 31, 2021, the related unamortized lease incentive obligation was $2.7 million.

In 2018, the Company elected to draw an additional tenant improvement loan of $992 thousand offered in the Station 41 lease. This loan is incorporated into, and acts to increase the base rent over the remaining life of the lease. The increase in rent includes a charge for interest, which accrues on the principal amount outstanding at a rate equal to 8%. The Company accounts for this additional tenant improvement loan as a oote payable on the Condensed Consolidated Balance Sheets with the current portion included in the Current Portion of Notes Payable.

In 2019, the Company amended the Station 41 Lease to include additional space in the conjoining unit with the right to use the new space beginning in June 2020 for an additional 7 years. This amendment for the extra space includes provisions for escalating rent payments. Rent expense is recognized straight-line over the term of the lease.

In January 2021, the company amended the Station 41 Lease, increasing the leased square footage by an additional 91,478 square feet. This amendment includes provisions for escalating rent, has a 10 year term and additional total minimum payments of $32.4 million. This lease included a tenant improvement allowance of up to approximately $10.1 million.

Milpitas Lease
In August 2019, the Company entered a new facilities lease, with the right of use and payments beginning in August 2019. The term of the lease is 9 years. This lease includes provisions for escalating rent payments. Rent expense is recognized on a straight-line basis over the term of the lease.

Future Minimum Lease Payments
Future minimum commitments as of March 31, 2021 under the Company's lease agreements are as follows:

(in thousands)		Amount
2021	$	2,911
2022		4,963
2023		7,344
2024		7,371
2025		7,560
Thereafter		33,214
Total Minimum Payments	$	63,363

Contract Obligations
In the normal course of business, the Company enters into contracts with clinical research organizations, drug manufacturers and other vendors for preclinical and clinical research studies, research and development supplies and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancellable contracts.

Indemnification

The Company has agreed to indemnify its officers and directors for certain events or occurrences, while the officer or director is or was serving at the Company's request in such capacity. The Company purchases directors and officers liability insurance coverage that provides for corporate reimbursements of covered obligations that limits the Company's exposure and enables it to recover a portion of potential future amounts paid. The Company had no liabilities recorded for these agreements as of March 31, 2021 and December 31, 2020 as no amounts in excess of insurance coverage are probable or estimable.

Employee Agreements

The Company has signed employment agreements with certain key employees pursuant to which if their employment is terminated by the Company following a change of control of the Company, the employees are entitled to receive certain benefits, including accelerated vesting of equity incentives.

Legal Matters

The Company is not currently a party to any material litigation or other material legal proceedings. The Company may, from time to time, be involved in various legal proceedings arising in the normal course of business, and an unfavorable resolution of any of these matters could materially affect the Company's future financial position, results of operations or cash flows.

Note 7. Convertible Preferred Stock

The Company has issued preferred stock as part of various financing events. No new convertible preferred stock was issued during three months ended March 31, 2021 and 2020. As of March 31, 2021 and 2020, there were no cumulative dividends owed or in arrears on the preferred stock.

Convertible Preferred Stock consisted of the following as of March 31, 2021 and December 31, 2020:

(in thousands except share data)	Preferred Shares Authorized	Preferred Shares Issued and Outstanding	Carrying Value	Liquidation Preferences	Shares of Common Stock Issuable Upon Conversion
Series A	30,078,402	29,965,754	$ 21,281	$ 21,281	29,965,754
Series A-1	4,975,521	4,975,520	—	—	4,975,520
Series B	21,497,667	21,471,898	59,913	60,000	21,471,898
Series C	18,956,354	18,776,345	119,915	122,058	22,286,298
Series D	45,926,769	36,898,548	247,203	247,511	36,898,548
Total convertible preferred stock	121,434,713	112,088,065	$ 448,312	$ 450,850	115,598,018

In April 2021, all outstanding shares of convertible preferred stock converted into common stock as part of the IPO. See Note 16, "Subsequent Events" for additional details.

Balance Sheet Classification

The Company's convertible preferred stock is classified outside of stockholders' deficit on the Condensed Consolidated Balance Sheets because the holders of such shares have liquidation rights in the event of a deemed liquidation that, in certain situations, are not solely within the control of the Company and would require the redemption of the then-outstanding convertible preferred stock. The convertible preferred stock is not redeemable, except in the event of a deemed liquidation event.

Note 8. Common stock

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Common stockholders are entitled to receive dividends, as may be declared by the Company's board of directors. As of March 31, 2021 and December 31, 2020, no dividends had been declared.

As of March 31, 2021 and December 31, 2020, there were 188,400,000 shares of common stock authorized, of which 24,036,725 and 22,314,685 shares were outstanding, respectively.

Additionally, the Company has reserved the following shares of common stock for issuance as of March 31, 2021:

	Shares
Conversion of series A preferred stock	29,965,754
Conversion of series A-1 preferred stock	4,975,520
Conversion of series B preferred stock	21,471,898
Conversion of series C preferred stock	22,286,298
Conversion of series D preferred stock	36,898,548
Conversion of series A warrants	112,647
Conversion of series B warrants	25,762
Conversion of series C warrants	213,646
2016 equity incentive plan	25,686,958
Key personnel incentive plan	1,601,566
Total shares of common stock reserved for issuance	143,238,597

Note 9. Collaborative and Other Research and Development Contracts

Bayer AG

In August 2020, the Company entered into a Research Collaboration and Option Agreement (the Bayer Agreement) with Bayer AG (Bayer) for a five-year term pursuant to which the Company and Bayer may initiate approximately ten research projects related to fibrosis across multiple organ systems, including lung, liver, and heart. Under the agreement, the Company contributed compounds from our proprietary library and Bayer contributed compounds from its proprietary library and will contribute scientific expertise throughout the collaboration.

Under the terms of the agreement, the Company received a non-refundable upfront payment of $30.0 million, which was recorded as unearned revenue on the Condensed Consolidated Balance Sheet. The Company determined that it has one performance obligation under the agreement, which is to perform research and development services for Bayer. Recursion determined the transaction price to be the $30.0 million upfront payment received and allocated the amount to the single performance obligation. The Company is recognizing the revenue over time using a cost-based input method, based on labor costs incurred to perform the research and development services. This method of recognizing revenue requires the Company to make estimates of the total costs to provide the services required under the performance obligation. A significant change in these estimates could have a material effect on the timing and amount of revenue recognized in future periods.

For the three months ended March 31, 2021, the Company recognized $2.5 million of revenue resulting from the collaboration. There is $10.0 million and $14.2 million of current and non-current unearned revenue, respectively, remaining as of March 31, 2021. The allocation of unearned revenue between current and non-current is based on Recursion's estimates of when the Company expects to incur the related costs.

Under each research project, the Company will work with Bayer to identify potential candidates for development. Under the agreement, Bayer has the first option for licenses to potential candidates. Each such license could potentially result in option exercise fees and development and commercial milestones paid to the Company with an aggregate value of up to approximately $100.0 million (for an option on a lead series) or up to approximately $120.0 million (for an option on a development candidate), as well as tiered royalties for each such license, ranging from low- to mid-single digit percentages of sales, depending on commercial success.

The National Institute of Health

During the year ended December 31, 2018, the Company was awarded a grant by the National Institute of Health, which included potential funding of $1.4 million. Revenue recognized related to this grant during the three months ended March 31, 2021 and 2020 was $62 thousand and $60 thousand, respectively. As of March 31, 2021, $395 thousand of the potential funding remained.

As of March 31, 2021 and December 31, 2020, the Company had $62 thousand and $140 thousand of outstanding receivables, respectively with the National Institute of Health, which was deemed to be collectible.

Note 10. Stock-Based Compensation

Stock Options

Key Personnel Incentive Plan
In November 2013, the Company adopted the Key Personnel Incentive Plan (the KPI Plan). The KPI Plan provides for the grant of restricted units and non-statutory option awards to employees, non-employee directors and consultants of the Company. As of March 31, 2021 and December 31, 2020, there were no shares of common stock available for grant under the KPI Plan.

The KPI Plan provides for the early exercise of options. Upon exercise, such option holder receives common stock of the Company, subject to a lapsing right of repurchase. Upon termination of such individual, the Company may exercise its right to repurchase any unvested shares for the exercise price paid by the option holder.

2016 Equity Incentive Plan
In August 2016, the Board of Directors and the stockholders of the Company adopted the 2016 Equity Incentive Plan. Under the 2016 Plan, 25,686,958 shares of common stock were reserved. The Company may grant options to purchase common stock, stock appreciation rights, restricted stock awards and other forms of stock-based compensation. Stock options generally vest over four years and expire no later than 10 years from the date of grant.

As of March 31, 2021, 3,684,798 shares of common stock are available for grant. Stock option activity during the three months ended March 31, 2021 was as follows:

(in thousands except share data)	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (In Years)	Aggregate Intrinsic Value
Outstanding as of 12/31/2020	20,937,443	$ 1.85	8.5	$ 12,956
Granted	1,849,311	4.44		
Cancelled	384,540	2.33		
Exercised	1,722,027	1.25		4,455
Outstanding as of March 31, 2021	20,680,187	$ 2.14	8.5	$ 50,346
Exercisable as of March 31, 2021	6,365,727	$ 1.20	6.9	$ 21,450
Non-vested options as of March 31, 2021	14,314,460	$ 2.55	9.2	$ 28,897

The fair value of options granted to employees is calculated on the grant date using the Black-Scholes option valuation model. The weighted-average grant-date fair values of stock options granted during the three months ended March 31, 2021 and 2020 were $2.63 and $1.33, respectively.

The following weighted-average assumptions were used to calculate the grant-date fair value of employee stock options:

	Three months ended March 31,	
	2021	2020
Expected term (in years)	6.1	6.2
Expected volatility	66%	65%
Expected dividend yield	—	—
Risk-free interest rate	0.78%	1.33%

For the three months ended March 31, 2021, the Company granted 150,000 shares of stock options with a performance and service condition that had a fair value of $358 thousand. No expense related to these options was recorded during the three months ended March 31, 2021 as the performance condition was not considered probable.

For the three months ended March 31, 2020, the Company granted 1,500,000 shares of stock options with performance, market conditions and service conditions. At grant date, the Company estimated that the fair value of the options was approximately $2.0 million. No expense related to these options was recorded during the three months ended March 31, 2021 and 2020 as the performance conditions were not considered probable.

During the years ended December 31, 2020 and 2017, the Company granted options to purchase 120,000 and 330,000 shares, respectively, of common stock to non-employee consultants. These options were granted in exchange for consulting services and vest over a period that approximates the term of the services to be provided by the Company. The fair value of the options granted prior to 2020 were remeasured in each period until they were fully vested. Following the adoption of ASU 2018-07 on January 1, 2020, the fair value of options granted to non-employees were no longer remeasured subsequent to the grant date. The fair value of each option on the date of grant was calculated using the Black-Scholes option model. There were no grants to non-employee consultants during the three months ended March 31, 2021 or 2020.

The following table presents the classification of stock-based compensation expense for employees and non-employees within the Condensed Consolidated Statements of Operations and Comprehensive Loss:

	Three months ended March 31,	
(in thousands)	**2021**	**2020**
Research and development	$ 628	$ 688
General and administrative	$ 1,070	$ 577
Total	$ 1,698	$ 1,265

As of March 31, 2021, there was $22.0 million of unamortized stock-based compensation cost related to unvested stock options which is expected to be recognized over a weighted average period of 2.98 years.

Warrants

In connection with the execution of the December 2016 Pacific loan agreement (see Note 5, “Notes Payable” for additional details), the Company issued Pacific fully vested warrants to purchase Series A Preferred Stock. In May 2017, the Company drew on additional borrowing capacity under the Pacific loan agreement, this required the Company to issue additional fully vested warrants. These Series A warrants remained outstanding as of March 31, 2021.

In July 2018, the Company drew on additional borrowing capacity under an amended agreement. This required the Company to issue fully vested warrants to purchase Series B Preferred Stock. These warrants remained outstanding as of March 31, 2021.

In January 2020, the Company issued warrants to purchase 180,000 shares of Series C Preferred Stock at a purchase price of $6.50 per share as part of a services agreement. The warrants vest ratably over 18 months. These warrants remained outstanding and 139,999 were vested and exercisable as of March 31, 2021. The grant date fair value was $4.10 per share. As of March 31, 2021, there was $158 thousand of unamortized cost related to the unvested warrants which is expected to be recognized over four months.

The following tables summarize the Series A and B warrants outstanding as of March 31, 2021:

(in thousands except share data)

Series A	Grant Date	Number of Warrants	Exercise Price	Fair Value as of March 31, 2021	Fair Value as of December 31, 2020
2017 Warrants	12/19/2016	84,486	$ 0.71	$ 56,232	$ 58,000
2018 Warrants	5/27/2017	28,161	$ 0.71	$ 18,743	$ 19,000

(in thousands except share data)

Series B	Grant Date	Number of Warrants	Exercise Price	Fair Value as of March 31, 2021	Fair Value as of December 31, 2020
2019 Warrants	7/9/2018	25,762	$ 2.79	$ 45,499	$ 48,000

The fair value of the warrants was calculated using the Black-Scholes option-pricing model with the following weighted average assumptions:

	Three months ended March 31,	
	2021	2020
Expected term (in years)	6.16	7.12
Expected volatility	66%	66%
Expected dividend yield	—	—
Risk-free interest rate	1.20%	0.70%

The FASB has issued accounting guidance on the classification of freestanding warrants and other similar instruments on shares that are redeemable (either puttable or mandatorily redeemable). The guidance requires liability classification for certain warrants issued that are exercisable into convertible preferred stock. The initial fair values of Series A and B warrants were recorded as debt issuance costs, which resulted in a reduction in the carrying value of the debt and subsequent accretion. The Company remeasures the Series A and B warrants on each Condensed Condensed Consolidated Balance Sheet date. The change in the valuation is recorded in the Condensed Consolidated Statements of Operations and Comprehensive Loss.

The Series C warrants compensation expense is being recorded ratably over the requisite service period based on the award's fair value at the date of grant in general and administrative expense. These warrants were classified as equity as they were issued to non-employees for services and the convertible preferred stock is not redeemable, except in the event of a deemed liquidation event, which is not considered probable.

The following is a summary of the changes in the Company's Series A and B warrant liability balance during the three months ended March 31, 2021 and 2020:

(in thousands)

Balance as of December 31, 2019	$ 128
Net decrease in fair value of warrants	(10)
Balance as of March 31, 2020	$ 118

Balance as of December 31, 2020	$ 125
Net decrease in fair value of warrants	(5)
Balance as of March 31, 2021	$ 120

Note 11. Employee Benefit Plans

The Company has an employee benefit plan under Section 401(k) of the Internal Revenue Code. The plan allows employees to make contributions up to a specified percentage of their compensation. The Company is currently contributing up to 4% of employee base salary, by matching 100% of the first 4% of annual base salary contributed

by each employee. Employer expenses were approximately $281 thousand and $199 thousand during the three months ended March 31, 2021 and 2020, respectively.

Note 12. Income Taxes

The Company did not record any income tax expense during the three months ended March 31, 2021 and 2020. The Company has historically incurred operating losses and maintains a full valuation allowance against its net deferred tax assets. Valuation allowances are recorded when the expected realization of the deferred tax assets does not meet a “more likely than not” criterion. Realization of the Company’s deferred tax assets are dependent upon the generation of future taxable income, the amount and timing of which are uncertain.

Net operating loss carryforwards (NOLs) and tax credit carry-forwards are subject to review by the Internal Revenue Service (IRS) and may become subject to annual limitations due to ownership changes that have occurred previously or that could occur in the future under Section 382 of the Internal Revenue Code. The Company has not conducted a study to assess whether a change of control has occurred or whether there have been multiple changes of control since inception due to the significant complexity and cost associated with such a study. Any limitation may result in expiration of a portion of the NOLs or research and development tax credit carryforwards before utilization. Further, until a study is completed and any limitation is known, no amounts are being presented as an uncertain tax position.

The Company files income tax returns in the United States, Utah, and California. The Company is not currently under examination in any of these jurisdictions. The Company is subject to income tax examinations on all federal returns since the 2018 tax return.

Note 13. Net Loss Per Share

Recursion issued certain convertible preferred stock that was concluded to be participating securities. Due to the presence of participating securities, Recursion calculates net loss per share using the more dilutive of the treasury stock or the two-class method. For periods presented in which the Company reports a net loss, the losses are not allocated to the participating securities. As the Company reported a net loss during the three months ended March 31, 2021 and 2020, diluted net loss per share is the same as basic net loss per share, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive.

The following table sets forth the computation of basic and diluted net loss per share:

	Three months ended March 31,	
(in thousands, except share amounts)	**2021**	**2020**
Numerator:		
Net loss	$ (30,717)	$ (18,424)
Denominator:		
Weighted average common shares outstanding	23,035,623	21,639,891
Net loss per share, basic and diluted	$ (1.33)	$ (0.85)

The Company excluded the following potential common shares from the computation of diluted net loss per share for the periods indicated because including them would have had an anti-dilutive effect:

	Three months ended March 31,	
	2021	**2020**
Convertible preferred stock	115,598,018	78,699,470
Options to purchase common stock	4,706,313	3,373,642
Warrants	122,358	115,029
Total	120,426,689	82,188,141

Note 14. Fair Value Measurements

The fair value hierarchy consists of the following three levels:

- Level 1 — Valuations based on unadjusted quoted prices in active markets for identical assets that the company has the ability to access;
- Level 2 — Valuations based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active and model-based valuations in which all significant inputs are observable in the market; and
- Level 3 — Valuations using significant inputs that are unobservable in the market and include the use of judgment by the company's management about the assumptions market participants would use in pricing the asset or liability.

As of March 31, 2021 and December 31, 2020, cash and cash equivalents (including restricted cash) included bank deposits held in checking and savings accounts. The Company is required to maintain a balance in a collateralized account to secure the Company's credit cards. Additionally, the Company holds restricted cash related to an outstanding letter of credit issued by Pacific Western Bank, which was securing certain Company obligations relating to tenant improvements. As of March 31, 2021 and December 31, 2020, cash restricted for the letters of credit was $4.0 million. The remaining restricted cash related to the Company's credit cards.

The Company measures the Series A and B Preferred Stock warrant liabilities at fair value using the Black-Scholes option-pricing model. See Note 10, "Stock-based Compensation" for details on the valuation of the warrant liabilities and a reconciliation of the balance.

The following tables summarize the Company's assets and liabilities that are measured at fair value on a recurring basis:

		Basis of fair value measurement		
(in thousands)	**March 31, 2021**	**Level 1**	**Level 2**	**Level 3**
Assets				
Cash and equivalents	$ 214,088	$ 214,088	$ —	$ —
Restricted cash	5,042	5,042	—	—
Total assets	$ 219,130	$ 219,130	$ —	$ —
Liabilities				
Warrant liability	$ 120	$ —	$ —	$ 120
Total liabilities	$ 120	$ —	$ —	$ 120

		Basis of fair value measurement		
(in thousands)	**December 31, 2020**	**Level 1**	**Level 2**	**Level 3**
Assets				
Cash and equivalents	$ 262,126	$ 262,126	$ —	$ —
Restricted cash	5,041	5,041	—	—
Total assets	$ 267,167	$ 267,167	$ —	$ —
Liabilities				
Warrant liability	$ 125	$ —	$ —	$ 125
Total liabilities	$ 125	$ —	$ —	$ 125

In addition to the financial instruments that recognized at fair value on the Condensed Consolidated Balance Sheets, the Company has certain financial instruments that are recognized at amortized cost or some basis other than fair value. The carrying amount of these amounts are considered to be representative of their approximate fair values.

The following tables summarize the Company's assets and liabilities that are not measured at fair value:

	Book values		Fair values	
(in thousands)	March 31, 2021	December 31, 2020	March 31, 2021	December 31, 2020
Liabilities				
Current portion of notes payable	$ 2,145	$ 1,073	$ 2,145	$ 1,073
Notes payable, net of current portion	10,339	11,414	10,339	11,414
Total liabilities	$ 12,484	$ 12,487	$ 12,484	$ 12,487

Note 15. Related Party Transactions

On December 5, 2017, the Company entered into a loan agreement with its Chief Executive Officer (CEO) to provide a loan of $595 thousand. The loan had a seven-year term. As of March 31, 2021, no amount remained outstanding on the loan. As of March 31, 2020, the outstanding balance of $595 thousand was recorded on the Condensed Consolidated Balance Sheets within other non-current assets.

Note 16. Subsequent Events

Initial Public Offering

On April 20, 2021, the Company closed its IPO and issued 27,878,787 shares of its common stock at a price of $18.00 per share for approximate net proceeds of $462.6 million, after deducting underwriting discounts and commissions of $35.1 million and expenses of $4.1 million. In connection with the IPO, all shares of Series A, B, C and D convertible preferred stock converted into 115,598,018 shares of Class A common stock.

Stock Split

In April 2021, the Board of Directors approved a 1.5-for-1 forward stock split of the Company's common and convertible preferred stock. Each shareholder of record on April 9, 2021 received 1.5 shares for each then-held share. The split proportionally increased the authorized shares and did not change the par values of the Company's stock. The split affected all stockholders uniformly and did not affect any stockholder's ownership percentage of the Company's shares of Common Stock. All shares and per share amounts presented within these condensed consolidated financial statements were adjusted to reflect the forward stock split for all periods presented.

Equity Plans

In April 2021, the Company's Board of Directors adopted, and its stockholders approved, the 2021 Equity Incentive Plan (the "2021 Plan"), which became effective in connection with the closing of the Company's IPO. A total of 16,186,000 shares of the Company's Class A common stock have been reserved for issuance under the 2021 Plan in addition to any shares of Class A common stock outstanding under the 2016 Plan that expire are withheld by the Company for payment of an exercise price or for satisfying tax withholding obligations, or are forfeited to the Company due to failure to vest, subject to an addition of a maximum of 19,479,146 shares. The number of shares of Class A common stock reserved for future issuance under the 2021 Plan will also be increased pursuant to provisions for annual automatic evergreen increases.

In April 2021, the Company's Board of Directors adopted, and its stockholders approved, the 2021 Employee Stock Purchase Plan (the "2021 ESPP"), which became effective in connection with the closing of the Company's IPO. A total of 3,238,000 shares of the Company's Class A common stock have been reserved for issuance under the 2021 ESPP. In addition, the number of shares reserved for future issuance under the 2021 ESPP will be increased for annual automatic evergreen increases.

Class A and B Common Shares Authorization

In April 2021, the Company's Board of Directors authorized two classes of common stock, Class A and Class B. The rights of the holders of Class A and B common stock are identical, except with respect to voting and conversion. Each share of Class A common stock is entitled to one vote per share. Each share of Class B common stock is entitled to ten votes per share and is convertible at any time into one share of Class A common stock.

All Class B common stock is held by Christopher Gibson, Ph.D., our Chief Executive Officer, or his affiliate. Dr. Gibson and his affiliate hold outstanding shares of Class B common stock representing approximately 38% of the voting power of the Company's outstanding shares. This voting power may increase over time as Dr. Gibson vests in and exercises equity awards outstanding. If all the equity awards held by Dr. Gibson had been fully vested and exercised and exchanged for shares of Class B common stock as of the date of the IPO, Dr. Gibson and his affiliate would hold approximately 42% of the voting power of the Company's outstanding shares. As a result, Dr. Gibson will be able to significantly influence any action requiring the approval of Recursion stockholders, including the election of the board of directors, the adoption of amendments to the Company's certificate of incorporation and bylaws, and the approval of any merger, consolidation, sale of all or substantially all of the Company's assets, or other major corporate transaction.

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

The following is a discussion and analysis of the financial condition of Recursion Pharmaceuticals, Inc. (Recursion, the Company, or we) as of March 31, 2021 and December 31, 2020 and the results of operations during the three months ended March 31, 2021 and 2020. This commentary should be read in conjunction with the unaudited Condensed Consolidated Financial Statements and accompanying notes appearing in Item 1, “Financial Statements” and the Company’s audited consolidated financial statements and accompanying notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in the final prospectus for our initial public offering (IPO), which was filed with the Securities and Exchange Commission (SEC), pursuant to Rule 424(b)(4) on April 16, 2020 (the Final Prospectus). This discussion, particularly information with respect to our future results of operations or financial condition, business strategy and plans, and objectives of management for future operations, includes forward-looking statements that involve risks and uncertainties as described under the heading "Special Note About Forward-Looking Statements" in this Quarterly Report on Form 10-Q. You should review the disclosure under the heading "Risk Factors" in this Quarterly Report on Form 10-Q for a discussion of important factors that could cause our actual results to differ materially from those anticipated in these forward-looking statements.

Overview

We are a clinical-stage biotechnology company decoding biology by integrating technological innovations across biology, chemistry, automation, data science and engineering to radically improve the lives of patients and industrialize drug discovery. Central to our mission is the Recursion Operating System (Recursion OS) that combines an advanced infrastructure layer to generate what we believe is one of the world’s largest and fastest-growing proprietary biological and chemical datasets, and the Recursion Map, a suite of custom software, algorithmic and machine learning tools that we use to explore foundational biology unconstrained by human bias, navigate to new biological insights, and accelerate programs. The combination of wet-lab biology and in silico tools in our closed-loop system accelerates our drug discovery process and differentiates us from others within the industry. Similarly, our balanced team of life scientists and computational and technical experts creates an environment where empirical data, statistical rigor, and creative thinking are brought to bear on every decision. Thus far, we have leveraged our Recursion OS to create three value drivers: i) advancement of 37 internally-developed programs focused on areas of significant unmet need, several of which have market opportunities in excess of $1.0 billion in annual sales, ii) strategic partnerships with leading biopharmaceutical companies, and iii) Induction Labs, a growth engine created to explore new extensions of the Recursion OS both within and beyond therapeutics. The number of programs we are advancing has more than doubled in size since 2019. Although we cannot provide any guarantee that we will achieve similar development timelines with future product candidates, we believe we will be able to continue accelerating the pace of program additions in the future. As such, we are a biotechnology company scaling more like a technology company.

Integrating technological innovations across biology, chemistry, automation, data science and engineering in order to industrialize the discovery of therapeutics has required us to raise significant capital and adopt a long-term approach to capital allocation that balances near-term risks and long-term value creation. Of our 37 internally developed programs, we have four drug candidates that we expect will be entering clinical trials in the next four to five quarters. Our rapidly growing team of more than 200 employees is balanced between life scientists (approximately 40% of employees) and computational and technical expects (approximately 35% of employees).

From inception through March 31, 2021, we have raised approximately $448.9 million in equity financing from investors in addition to $30.0 million in an upfront payment from our strategic partnership with Bayer. We use the capital we have raised to fund operations and investing activities across platform research operations, drug discovery, clinical development, digital and other infrastructure, creation of our portfolio of intellectual property, and administrative support. We do not have any products approved for commercial sale and have not generated any revenues from product sales. We had cash and cash equivalents of $214.1 million as of March 31, 2021.

Since inception, we have incurred significant operating losses. Our net losses were $30.7 million and $18.4 million during the three months ended March 31, 2021 and 2020, respectively. As of March 31, 2021, our accumulated deficit was $244.3 million. We expect to continue to incur significant expenses and operating losses for the

foreseeable future. In addition, we anticipate that our expenses will increase significantly in connection with our ongoing activities, as we:

- continue our platform research and drug discovery and clinical development efforts;
- continue to invest in the scale and scope of our platform research capabilities in order to identify novel biology and therapeutics;
- continue to invest in expansions of the modality capabilities across our platform including large molecules and RNA therapeutics;
- invest in or acquire companies or intellectual property that achieves our platform objectives;
- accelerate investments in mechanisms to significantly expand our total addressable markets through Induction Labs;
- utilize our platform to identify and validate additional therapeutic candidates, technologies, and business opportunities;
- initiate additional preclinical studies or clinical or other trials for our product candidates, including under our collaboration agreements;
- continue or expand the scope of our clinical trials for our product candidates;
- conduct the above and below development activities on an extensive pipeline of therapeutic candidates across diverse areas of biology;
- establish agreements with contract research organizations (CROs) and contract manufacturing organizations (CMOs) in connection with our preclinical studies and clinical trials;
- change or add to internal manufacturing capacity or capability;
- change or add additional suppliers;
- seek regulatory approval for our therapeutic candidates;
- seek marketing approvals and reimbursement for our therapeutic candidates;
- establish a sales, marketing, and distribution infrastructure to commercialize any products for which we may obtain marketing approval;
- acquire or in-license other therapeutic candidates and technologies;
- make milestone or other payments under any in-license agreements;
- maintain, protect, defend, enforce, and expand our intellectual property portfolio;
- add additional infrastructure to our quality control, quality assurance, legal, compliance, and other groups to support our operations as we progress our therapeutics candidates toward commercialization;
- add additional infrastructure to support our operations as a public company and our product development and future commercialization efforts, including expansion of company sites;
- attract and retain world-class talent, including in competitive areas; and
- experience any delays or encounter issues with any of the above.

Components of Operating Results

Revenues

To date, our business generates revenue from two sources: i) grant revenue and ii) operating revenue.

Grant Revenue—We recognize grant revenue in the period in which the revenue is earned in accordance with the associated grant agreement, which is the period in which corresponding reimbursable expenses under the grant agreement are incurred. Grant revenue was generated from grants awarded by the National Institute of Health.

Operating Revenue—Operating revenue is primarily generated through funded research and development agreements derived from strategic alliances such as our strategic partnership with Bayer. We are entitled to receive variable consideration as certain milestones are achieved. The timing of revenue recognition is not directly correlated to the timing of cash receipts.

Research and Development

Research and development expenses account for a significant portion of our operating expenses. We recognize research and development expenses as incurred. Research and development expenses comprise costs incurred in performing research and development activities, including:

- cost to develop and operate our platform;
- discovery efforts leading to development candidates;
- clinical development costs for our programs;
- costs associated with discovery as well as clinical development efforts, including research materials and external research;
- materials and supply costs associated with the manufacture of drug substance and drug product for preclinical testing and clinical trials;
- personnel-related expenses, including salaries, benefits, bonuses, and stock-based compensation for employees engaged in research and development functions;
- costs associated with operating our digital infrastructure; and
- facilities, depreciation and amortization, insurance and other direct and allocated expenses incurred as a result of research and development activities.

We monitor research and development expenses directly associated with our clinical assets to some degree at the program level, however, indirect costs associated with clinical development and the balance of our research and development expenses are not tracked at the program or candidate level.

We recognize expenses associated with third-party contracted services based on the completion of activities as specified in the applicable contracts. Upon termination of contracts with third parties, our financial obligations are limited to costs incurred or committed to date. Any advance payments for goods or services to be used or rendered in future research and product development activities pursuant to a contractual arrangement are classified as prepaid expenses until such goods or services are rendered.

General and Administrative

The Company expenses general and administrative costs as incurred. General and administrative expenses consist primarily of salaries, benefits, stock-based compensation, and outsourced labor for personnel in executive, finance, human resources, legal and other corporate administrative functions. General and administrative expenses also include legal fees incurred relating to corporate and patent matters, professional fees incurred for accounting, auditing, tax and administrative consulting services, insurance costs, facilities and depreciation expenses.

Recursion expects that our general and administrative expenses will increase in the future to support personnel in research and development and to support our operations as we increase our research and development activities and activities related to the potential commercialization of our initial drug candidates REC-4881, REC-3599, REC-2282, and REC-994. The Company also expects to incur increased expenses associated with operating as a public company, including costs of accounting, audit, legal, regulatory, and tax-related services associated with maintaining compliance with exchange listing and Securities and Exchange Commission, or SEC, requirements, director and officer insurance costs, and investor and public relations costs.

Other Income, Net

Other income, net primarily consists of interest earned on our cash and cash equivalents and interest expense incurred under our loan agreements.

Results of Operations

Comparison of the three months ended March 31, 2021 and 2020

The following table summarizes the Company's results of operations:

	Three months ended March 31,		Change	
(in thousands, except percentages)	**2021**	**2020**	**$**	**%**
Revenue				
Grant revenue	$ 62	$ 60	$ 2	3.5 %
Operating revenue	2,500	—	2,500	n/m
Total revenue	2,562	60	2,502	>100%
Operating expenses				
Research and development	24,109	12,842	11,267	87.7 %
General and administrative	8,937	5,561	3,376	60.7 %
Total operating expenses	33,046	18,403	14,643	79.6 %
Loss from operations	(30,484)	(18,343)	(12,141)	66.2 %
Other loss, net	(233)	(81)	(152)	>100%
Net loss and comprehensive loss	$ (30,717)	$ (18,424)	$ (12,293)	66.7 %

n / m = Not meaningful

Revenue

The following table summarizes the components of revenue recognized during the three months ended March 31, 2021 and 2020:

	Three months ended March 31,		Change	
(in thousands, except percentages)	**2020**	**2019**	**$**	**%**
Revenue				
Grant revenue	$ 62	$ 60	$ 2	3.5 %
Operating revenue	2,500	—	2,500	n/m
Total revenue	$ 2,562	$ 60	$ 2,502	>100%

Revenue increased by $2.5 million, or >100%, to $2.6 million during the three months ended March 31, 2021 compared to $60 thousand during the three months ended March 31, 2020. The increase in revenue was due to revenue recognized from our strategic partnership with Bayer entered into in August 2020.

Research and Development

The following table summarizes the components of research and development expense during the three months ended March 31, 2021 and 2020:

	Three months ended March 31,		Change	
(in thousands, except percentages)	**2021**	**2020**	**$**	**%**
Research and development expenses				
Platform	$ 10,532	$ 6,319	$ 4,212	66.7 %
Discovery	7,739	4,047	3,692	91.2 %
Clinical	2,955	1,323	1,632	>100%
Stock based compensation	628	688	(60)	(8.7)%
Other	2,255	465	1,789	>100%
Total research and development expenses	$ 24,109	$ 12,842	$ 11,265	87.7 %

Significant components of research and development expense include the following: Platform, which refers primarily to expenses related to screening through hit identification; Discovery, which refers primarily to expenses related to hit identification through development candidate; and Clinical, which refers primarily to expenses related to development candidate and beyond.

Research and development expenses increased by $11.3 million, or 87.7%, to $24.1 million during the three months ended March 31, 2021 compared to $12.8 million during the three months ended March 31, 2020. The increase in research and development expenses was due to an increased number of experiments screened on the platform, an increased number of pre-clinical assets being validated and increased clinical costs as studies progress.

General and Administrative Expenses

The following table summarizes the components of general and administrative expense during the three months ended March 31, 2021 and 2020:

	Three months ended March 31,		Change	
(in thousands, except percentages)	**2021**	**2020**	**$**	**%**
Total general and administrative expenses	$ 8,937	$ 5,561	$ 3,376	60.7 %

General and administrative expenses increased by $3.4 million, or 60.7%, to $8.9 million during the three months ended March 31, 2021 compared to $5.6 million during the three months ended March 31, 2020. The increase in general and administrative expenses was due to growth in size of the Company's operations including an increase in salaries and wages of $1.2 million, human resources costs, facilities costs, finance costs and other administrative costs associated with operating a growth-stage Company.

Other loss, net

The following table summarizes the components of Other loss, net during the three months ended March 31, 2021 and 2020:

	Three months ended March 31,		Change	
(in thousands, except percentages)	**2021**	**2020**	**$**	**%**
Interest expense	$ 249	$ 301	$ (52)	(17.2)%
Interest income	(16)	(220)	204	(92.8)%
Other loss, net	$ 233	$ 81	$ 152	>100%

Other loss, net increased by $152 thousand to $233 thousand during the three months ended March 31, 2021 compared to $81 thousand during the three months ended March 31, 2020. The increase in Other loss, net was primarily due to a decrease in interest earned from the Company's checking accounts.

Liquidity and Capital Resources

Sources of Liquidity

The Company has not yet commercialized any products and does not expect to generate revenue from the sales of any product candidates for several years. Cash and cash equivalents totaled $214.1 million as of March 31, 2021 and $262.1 million as of December 31, 2020.

The Company has incurred operating losses, experienced negative operating cash flows and Recursion anticipates that the Company will continue to incur losses for at least the foreseeable future. Our net loss totaled $30.7 million during the three months ended March 31, 2021 and $18.4 million during the three months ended March 31, 2020. As of March 31, 2021 and December 31, 2020, Recursion had an accumulated deficit of $244.3 million and $213.6 million, respectively.

To date, Recursion has financed the Company's operations primarily through private placements of preferred stock. Through March 31, 2021, the Company has received gross proceeds of $448.9 million from sales of our preferred stock. In April 2021, the Company completed an IPO receiving an approximate net proceeds of $462.6 million. See Note 16, "Subsequent Events" to the Condensed Consolidated Financial Statements for additional detail.

Over September and October 2020, the Company received a $30.0 million upfront payment from the Company's strategic partnership with Bayer.

Midcap Credit and Security Agreement

In September 2019, we entered into a Credit and Security Agreement with Midcap Financial Trust (Midcap), which we refer to as our Credit Agreement. The Credit Agreement includes: i) an initial term loan in an aggregate principal amount of $11.9 million; and ii) a second tranche term loan, which if drawn would result in an aggregate outstanding maximum principal amount of $26.9 million. The second tranche will become available to be drawn upon the achievement of certain drug development milestones. We are required to make interest-only payments from September 2019 to September 2021, and thereafter, 36 monthly principal payments of $330 thousand plus interest commencing in October 2021 and continuing until the maturity date in September 2024. The interest-only period will be extended an additional 12 months upon achievement of certain fundraising related milestones. Interest accrues on the principal amount outstanding at a floating per annum rate equal to the LIBOR (floor of 2.00%) rate plus 5.75%.

The debt is secured against all of our assets. The Credit Agreement includes standard affirmative and restrictive covenants and standard events of default, including payment defaults, breaches of covenants following any applicable cure period, a material impairment in the perfection or priority of Midcap's security interest or in the value of the collateral and a material adverse change in our business, operations, or conditions. Upon the occurrence of an event of default and following any applicable cure periods, Midcap may declare all outstanding obligations immediately due and payable and take such other actions as set forth in the Credit Agreement. As of March 31, 2021, the Company was in compliance with all debt covenants under the Credit Agreement. In 2019, we paid fees of approximately $298 thousand in connection with the origination of the Credit Agreement. These fees were deferred and recorded as a direct deduction from the carrying value of the loan payable and are amortized to interest expense over the remaining term of the Credit Agreement.

Cash Flows

The following table sets forth the primary sources and uses of cash and cash equivalents for each of the periods presented below:

	Three months ended March 31,	
(in thousands)	**2021**	**2020**
Cash used in operating activities	$ (30,755)	$ (17,817)
Cash used in investing activities	(19,416)	(684)
Cash provided by financing activities	2,134	5,997
Net decrease in cash and cash equivalents	$ (48,037)	$ (12,504)

Operating Activities

Net cash used in operating activities was $30.8 million during the three months ended March 31, 2021. Net cash used in operating activities increased from the three months ended March 31, 2020 due to higher costs incurred for research and development and general and administrative due to the Company's growth as well as the timing of working capital cash flows for the three months ended March 31, 2021. Net cash used in operating activities was $17.8 million during the three months ended March 31, 2020. Cash used in operating activities increased from the three months ended March 31, 2019 due to higher costs incurred for research and development and general and administrative due to the Company's growth which was partially offset by the timing of working capital cash flows for the three months ended March 31, 2020.

Investing Activities

Net cash used in investing activities was $19.4 million during the three months ended March 31, 2021. Cash used in investing activities was primarily for the purchase of a Dell EMC supercomputer as well as accessories and parts for a total of $17.9 million.

Net cash used in investing activities was $684 thousand during the three months ended March 31, 2020. Cash used in investing activities was primarily for the purchase of lab equipment and leasehold improvements.

Financing Activities

Net cash provided by financing activities was $2.1 million during the three months ended March 31, 2021. Cash provided by financing activities primarily consisted of $2.2 million of proceeds from the exercise of stock options.

Net cash provided by financing activities was $6.0 million during the three months ended March 31, 2020, which consisted primarily of $6.0 million of proceeds from the issuance of convertible notes. See Note 5, "Notes Payable" to the Condensed Consolidated Financial Statements for additional detail on the convertible notes.

Future Funding Requirements

Since inception, the Company has incurred significant operating losses. Given our broad and ambitious mission, we expect to continue to incur significant expenses and operating losses for the foreseeable future.

The Company believes that the net proceeds from the IPO, together with the Company's existing cash, and cash equivalents and borrowings available to us will be sufficient to fund the Company's operating expenses and capital expenditures for at least the next 12 months. The Company's assumptions that may be incorrect and we could exhaust our available capital resources sooner than we expect.

Recursion does not expect to generate significant revenue from out-licensing transactions, development milestones, or royalties until successfully completing significant drug development milestones, whether on our own or in collaboration with third parties, which Recursion expects will take a number of years. In order to commercialize the Company's drug candidates, we or our partners need to complete clinical development and comply with comprehensive regulatory requirements. Recursion is subject to a number of risks and uncertainties similar to those of other companies of the same size within the biotechnology industry, such as uncertainty of clinical trial outcomes, uncertainty of additional funding, and history of operating losses.

Developing pharmaceutical 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 product candidate for which we may obtain marketing approval. In addition, our drug candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of drugs 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 equity or convertible debt securities, your ownership interest may be diluted, and the terms of these securities may include liquidation or other preferences and anti-dilution protections that could adversely affect your rights as a 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, making capital expenditures, or declaring dividends, which could adversely impact our ability to conduct our business, and may require the issuance of warrants, which could potentially dilute your ownership interest further.

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.

Critical Accounting Estimates and Policies

A summary of the Company's significant accounting estimates and policies is included in Note 2, "Summary of Significant Accounting Policies" in our Final Prospectus. There have been no significant changes in the company's application of its critical accounting policies during the three months ended March 31, 2021.

Impact of the COVID-19 Pandemic

In March 2020, the World Health Organization declared the outbreak of novel coronavirus disease, or COVID-19, as a pandemic. The COVID-19 pandemic is evolving, and to date has led to the implementation of various responses, including government-imposed quarantines, travel restrictions and other public health safety measures. COVID-19 has caused market volatility and uncertainty around the world in various industries and, as a result, we expect our operations may also be affected. The Company is closely monitoring the impact of the pandemic of COVID-19 on all aspects of Recursion's business. The extent to which COVID-19 ultimately impacts our operations and financial position will depend on future developments, which are highly uncertain and cannot be predicted with confidence, such as the duration of the outbreak, new information that may emerge concerning the severity of COVID-19 or the effectiveness of actions to contain COVID-19 or treat its impact, among others. In addition, recurrences or additional waves of COVID-19 cases could cause other widespread or more severe impacts depending on where infection rates are highest.

The Company has not incurred any significant impairment losses in the carrying values of our assets as a result of the pandemic and we are not aware of any specific related event or circumstance that would require us to revise our estimates reflected in our audited consolidated financial statements.

Emerging Growth Company

The Company is an emerging growth company (EGC), as defined by the Jumpstart Our Business Startups Act of 2012 (the JOBS act). The JOBS Act, exempts EGCs from being required to comply with new or revised financial accounting standards until private companies are required to comply. Recursion as elected to use the extended transition period for new or revised financial accounting standards during the period in which we remain an EGC. However, the Company may adopt certain new or revised accounting standards early. This may make comparisons

of the Company's financial statements with other public companies difficult because of the potential differences in accounting standards used.

Recursion may remain an EGC until December 31, 2026 although if we: (1) become a "large accelerated filer;" (2) have annual gross revenues of $1.07 billion or more in any fiscal year; or (3) issue more than $1.0 billion of non-convertible debt over a three-year period, the Company would cease to be an EGC as of December 31 of the applicable year.

Recently Issued and Adopted Accounting Pronouncements

Refer to Note 2 in Item 1 of this Quarterly Report on Form 10-Q for information regarding recently issued and adopted accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

The Company is subject to market risk associated with changing interest rates on our variable rate note issued under our Credit Agreement with Midcap; the interest accrues on the principal amount outstanding at a floating per annum rate equal to the LIBOR rate plus 5.75% with a LIBOR floor of 2.00%. The interest rates applicable to our variable rate note may rise and increase the amount of interest expense. We do not purchase or hold any derivative instruments to protect against the effects of changes in interest rates. As of March 31, 2021 and December 31, 2020 the outstanding balance on the debt issued under our Credit Agreement with Midcap was $11.9 million.

The Company's cash and cash equivalents consist primarily of highly liquid investments in money market funds and cash on hand and have an original maturity date of 90 days or less. The fair value of our cash and cash equivalents would not be significantly affected by either an increase or decrease in interest rates, due mainly to the short-term nature of these instruments.

Item 4. Controls and Procedures.

The Company has established disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act) designed to ensure that information required to be disclosed in the reports that the Company 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 and is accumulated and communicated to management, including the principal executive officer (our Chief Executive Officer) and principal financial officer (our Chief Financial Officer), to allow timely decisions regarding required disclosure. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Evaluation of Disclosure Controls and Procedures

Our management has evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Quarterly Report on Form 10-Q. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures have been designed to provide reasonable assurance of achieving their objectives. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of March 31, 2021, our disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended March 31, 2021 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

As a result of the COVID-19 pandemic, many of the Company's employees are working remotely. Recursion has not identified any material changes in our internal control over financial reporting as a result of these changes to the working environment, in part because our internal control over financial reporting was designed to operate in a remote working environment. The Company is continually monitoring and assessing the COVID-19 situation to determine any potential impacts on the design and operating effectiveness of our internal controls over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

The information in Part I, Item 1, Note 6 is incorporated herein by reference.

Item 1A. Risk Factors.

RISK FACTORS

You should carefully consider the risks and uncertainties described below together with all of the other information contained in this Quarterly Report on Form 10-Q and our other public filings with the SEC. The risks described below are not the only risks facing our company. The occurrence of any of the following risks, or of additional risks and uncertainties not presently known to us or that we currently believe to be immaterial, could cause our business, prospects, operating results, and financial condition to suffer materially.

Risks Related to Our Financial Position and Need for Additional Capital

We are a clinical-stage biotechnology company with a limited operating history.
We are a clinical-stage biotechnology company with a limited operating history. Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. Since our inception in November 2013, we have focused substantially all of our efforts and financial resources on building our drug discovery platform and developing our initial drug candidates. We have no products approved for commercial sale and therefore have never generated any revenue from drug product sales, and we do not expect to generate any revenue from drug product sales in the foreseeable future. We have not obtained regulatory approvals to market any of our drug candidates and there is no assurance that we will obtain regulatory approvals to market and sell drug products in the future.

We have incurred significant operating losses since our inception and anticipate that we will incur continued losses for the foreseeable future.

We have incurred net losses in each year since our inception. Our net losses were $30.7 million and $18.4 million for the three months ended March 31, 2021 and 2020, respectively. We had an accumulated deficit of $244.3 million as of March 31, 2021. Substantially all of our operating losses have resulted from costs incurred in connection with research and development efforts, including clinical studies, and from general and administrative costs associated with our operations. We expect our operating expenses to significantly increase as we continue to invest in research and development efforts and the commencement and continuation of clinical trials of our existing and future drug candidates. In addition, if we obtain marketing approval for any drug candidates, we will incur significant sales, marketing, and outsourced-manufacturing expenses. We continue to incur additional costs associated with operating as a public company. As a result, we expect to continue to incur significant and increasing operating losses for the foreseeable future. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' deficit and working capital. Because of the numerous risks and uncertainties associated with developing pharmaceutical products and new technologies, we are unable to predict the extent of any future losses or when we will become profitable, if at all. Even if we do become profitable, we may not be able to sustain or increase our profitability on a quarterly or annual basis.

Our mission is broad and expensive to achieve and we will need to raise substantial additional funding. If we are unable to raise capital when needed, we would be forced to delay, reduce, or eliminate at least some of our product development programs, business development plans, strategic investments, or potential commercialization efforts.

We have ambitious plans to decode biology and deliver new drugs to the patients that need them. Our mission is broad, expensive to achieve and will require additional capital in the future. In addition, the development of pharmaceutical products is capital-intensive. We have four clinical stage programs and 33 additional programs in various stages of preclinical development. We expect our expenses to increase in connection with our ongoing

activities, particularly as we continue the research and development of, initiate clinical trials of, and potentially seek marketing approval for, our drug candidates, and add to our pipeline what we believe will be an accelerating number of additional programs. In addition, depending on the status of potential regulatory approval, or if we obtain marketing approval for any current or future drug candidates, we could expect to incur significant expenses related to product sales, marketing, manufacturing and distribution. We may also need to raise additional funds sooner if we choose to pursue additional indications and/or geographies for our drug candidates or otherwise expand more rapidly than we presently anticipate. Furthermore, , we have incurred, and expect to continue to incur, additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we would be forced to delay, reduce, or eliminate certain of our research and development programs or potential future commercialization efforts.

We expect that the net proceeds from our initial public offering completed on April 20, 2021, together with our existing cash and cash equivalents, borrowings available to us and short-term investments as of the date of this Quarterly Report on Form 10-Q, will be sufficient to fund our operating expenses and capital expenditures for at least the next 12 months. Our future capital requirements will depend on and could increase significantly as a result of many factors, including:

- the impact of any business interruptions to our operations, including the timing and enrollment of participants in our planned clinical trials, or to operations of our manufacturers, suppliers, or other vendors resulting from the COVID-19 pandemic or a similar public health crisis or other force majeure event;
- the scope, progress, results and costs of our current and future clinical trials and additional preclinical research for our programs;
- the number of future drug candidates that we pursue and their development requirements;
- the costs, timing, and outcome of regulatory review of our drug candidates;
- our ability to establish and maintain collaborations on favorable terms, if at all;
- the success of any collaborations that we may enter into with third parties;
- the extent to which we acquire or invest in businesses, products, and technologies, including entering into licensing or collaboration arrangements for drug candidates;
- the costs of preparing, filing, and prosecuting patent applications, maintaining, protecting, and enforcing our intellectual property rights and defending intellectual property-related claims;
- our headcount growth and associated costs as we expand our business operations and our research and development activities; and
- the costs of operating as a public company.

Identifying potential drug candidates and conducting preclinical development testing 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 and achieve product sales. In addition, our drug candidates, if approved, may not achieve commercial success. We anticipate that our commercial revenues, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives.

Any additional fundraising efforts may divert our management from day-to-day activities, which may adversely affect our ability to develop and commercialize our drug candidates and technologies, and we can provide no assurance that such funding will be available on terms that are acceptable to us, or at all.

Until such time, if ever, as we can generate substantial revenues, we expect to finance our cash needs through a combination of private and public equity offerings, debt financings, strategic collaborations, strategic alliances, and licensing arrangements. We do not have any committed external source of funds. Disruptions in the financial markets in general and more recently due to the COVID-19 pandemic may make equity and debt financing more difficult to obtain and may have a material adverse effect on our ability to meet our fundraising needs. We cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. Moreover, the terms of any financing may adversely affect the holdings or the rights of our stockholders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our shares to decline. To the extent that we raise additional capital through the sale of Class A common stock or securities convertible or exchangeable into Class A common stock, our stockholders' ownership interest will be diluted, and the terms of those securities may include liquidation or other preferences that materially adversely affect our stockholders' rights as a common stockholder. The incurrence of indebtedness would result in

increased fixed payment obligations and we may be required to agree to certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to make capital expenditures, declare dividends, or otherwise conduct our business. We could also be required to seek funds through arrangements with collaborators or otherwise at an earlier stage than otherwise would be desirable and we may be required to relinquish rights to some of our technologies or drug candidates, future revenue streams, or research programs or otherwise agree to terms unfavorable to us. If we are unable to obtain funding on a timely basis, we may be required to significantly curtail, delay or discontinue one or more of our research or development programs or the commercialization of any drug candidate or be unable to expand our operations or otherwise capitalize on our business opportunities, as desired, which could materially affect our business, financial condition, and results of operations.

We have no products approved for commercial sale and have not generated any revenue from product sales.

Our ability to become profitable depends upon our ability to generate substantial revenue in an amount necessary to offset our expenses. To date, we have not generated any revenue from our drug candidates or technologies, other than limited grant revenues, milestone payments from Takeda Pharmaceutical Company Limited and a technology access fee from Bayer, and we do not expect to generate any revenue from the sale of products in the near future. We do not expect to generate significant revenue unless and until we progress our drug candidates through clinical trials and obtain marketing approval of, and begin to sell one or more of our drug candidates, or otherwise receive substantial licensing or other payments. Our ability to generate revenue depends on a number of factors, including, but not limited to, our ability to:

- successfully complete preclinical studies;
- have Investigational New Drug, or IND, applications approved by the U.S. Food Drug Administration, or FDA, allowing us to commence clinical trials;
- successfully enroll subjects in, and complete, clinical trials;
- receive regulatory approvals from applicable regulatory authorities;
- initiate and successfully complete all safety and other studies required to obtain U.S. and foreign marketing approval for our drug candidates;
- establish commercial manufacturing capabilities or make arrangements with third-party manufacturers for clinical supply and commercial manufacturing;
- obtain and maintain patent and trade secret protection or regulatory exclusivity for our drug candidates;
- launch commercial sales of our drug candidates, if and when approved, whether alone or in collaboration with others;
- obtain and maintain acceptance of the drug candidates, if and when approved, by patients, the medical community, and third-party payors;
- effectively compete with other therapies;
- obtain and maintain healthcare coverage and adequate reimbursement;
- protect and enforce our intellectual property rights and defend against intellectual property claims;
- take temporary precautionary measures to help minimize the impact of the COVID-19 pandemic or other force majeure event on our business; and
- maintain a continued acceptable safety profile of the drug candidates following approval.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our drug candidates, which would materially harm our business. If we do not receive regulatory approvals for our drug candidates, we may not be able to continue our operations.

We or our current and future collaborators may never successfully develop and commercialize drug products, which would negatively affect our results of operation and our ability to continue our business operations.

We may not succeed in producing drug candidates that can be commercialized. To achieve success with our drug candidates, we or our current or future collaborators must develop, and eventually commercialize, a drug product or drug products that generate significant revenue. We currently generate revenues primarily from our collaboration relationships and expect to continue to derive most of our revenue from these relationships until such time as our or our collaborators' drug development and commercialization efforts are successful, if ever.

Achieving success in drug development will require us or our current or future collaborators to be effective in a range of challenging activities, including completing preclinical testing and clinical trials of drug candidates, obtaining regulatory approval for these drug candidates, and manufacturing, marketing, and selling any products for which we or they may obtain regulatory approval. We and our current drug discovery collaborators are only in the preliminary stages of most of these activities. We and they may never succeed in these activities and, even if we do, we may never generate revenues that are significant enough to achieve profitability, or even if our collaborators do, we may not receive option fees, milestone payments, or royalties from them that are significant enough for us to achieve profitability. Because of the intense competition in the market for our data solutions and the numerous risks and uncertainties associated with biopharmaceutical product development, we are unable to accurately predict when, or if, we will be able to achieve or sustain profitability.

Even if we achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would eventually depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, develop a pipeline of drug candidates, enter into collaborations, or even continue our operations. A decline in the value of our company could also cause our Class A common stock to decline substantially and our stockholders to lose all or part of their value in our Class A common stock.

Our quarterly and annual operating results may fluctuate significantly in the future due to a variety of factors, many of which are outside of our control and may be difficult to predict.

The amount of our future losses is uncertain and our quarterly and annual operating results may fluctuate significantly or may fall below the expectations of investors or securities analysts, each of which may cause our stock price to fluctuate or decline. The reasons our quarterly and annual operating results may fluctuate include the following:

- the cost to continue to maintain, develop, and integrate technological advancements;
- the timing, quality, regulatory compliance, and success or failure of clinical trials for our drug candidates or competing drug candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- our ability to successfully recruit and retain subjects, sites, and staff for clinical trials, and any delays caused by difficulties in such efforts;
- our ability to obtain marketing approval for our drug candidates, and the timing and scope of any such approvals we may receive;
- the timing and cost of, and level of investment in, research and development activities relating to our drug candidates, which may change from time to time;
- the timing, complexity, and cost of manufacturing our drug candidates, which may vary depending on the quantity of production and the terms of our agreements with manufacturers;
- our ability to attract, hire, and retain qualified personnel, including highly specialized scientists, clinicians, and engineers;
- expenditures that we will or may incur to develop additional drug candidates;
- the level of demand for our drug candidates should they receive approval, which may vary significantly;
- the risk/benefit profile, cost, and reimbursement policies with respect to our drug candidates, if approved, and existing and potential future therapeutics that compete with our drug candidates;
- the changing and volatile U.S. and global economic environments, including as a result of the COVID-19 pandemic and terrorism; and
- future accounting pronouncements or changes in our accounting policies.

The cumulative effects of these and other 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. 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 Class A common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated guidance we may have provided or provide in the future.

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

We may engage in various acquisitions and strategic partnerships in the future, including by licensing or acquiring complementary products, intellectual property rights, technologies, or businesses. Any acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of indebtedness or contingent liabilities;
- the issuance of our equity securities which would result in dilution to our stockholders' equity;
- assimilation of operations, intellectual property, products, and drug candidates 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 an acquisition or strategic partnership;
- 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 and their existing products or drug candidates and regulatory approvals; and
- our inability to generate revenue from acquired intellectual property, technology, and/or products sufficient to meet our objectives or even to offset the associated transaction and maintenance costs.

In addition, if we undertake such a transaction, 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.

Risks Related to the Discovery and Development of Drug Candidates

Our approach to drug discovery is unique and may not lead to successful drug products, for reasons including but not limited to challenges identifying mechanisms of action for our candidates.

We image cells and use cell morphology to understand how a diseased cell responds to drugs and when it appears normal. Biology is complex. If studying the shape, structure, form, and size of cells does not prove to be an accurate way to better understand diseases or does not lead to the biological insights, viable drug candidates, or products we anticipate, our drug discovery platform may not be useful or may not lead to successful drug products or we may have to pivot to a new business model, any of which could have an adverse effect on our reputation and results of operations. If the mechanism of action of a drug candidate is unknown, it may be more difficult to: i) choose the best lead to optimize from an efficacy standpoint and ii) avoid potential off-target side effects of the candidate that could affect safety. Such uncertainty could make it more difficult to form partnerships with larger pharmaceutical companies, as the expenses involved in late-phase clinical trials increase the level of risk related to potential efficacy and/or safety concerns, and may pose challenges to IND and/or NDA approval by the FDA or other regulatory agencies.

Our drug candidates are in preclinical or clinical development, which are lengthy and expensive processes with uncertain outcomes and the potential for substantial delays. We cannot give any assurance that any of our drug candidates will be successful in clinical trials or receive regulatory approval, which approval is necessary before they can be commercialized.

Our drug candidates are in preclinical or clinical development, which are lengthy and expensive processes with uncertain outcomes and the potential for substantial delays. We have not yet demonstrated our ability to complete clinical development, obtain regulatory approvals, manufacture a commercial scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization. We currently have four clinical-stage drug candidates focused on rare, monogenic diseases with no known established regulatory precedent. We anticipate filing IND applications with the FDA for Phase 2 studies and beginning such studies for all four drug candidates within the next four to five quarters. We may not be able to file such INDs or INDs for any other drug candidates on the timelines we expect, if at all, and any such delays could impact any additional product development timelines. For example, we may experience manufacturing delays with preclinical and clinical studies. Moreover, we cannot be sure that submission of an IND will result in the FDA allowing further clinical trials to begin, or that, once begun, issues will not arise that require us to suspend or terminate clinical trials. Commencing each of these clinical trials is subject to finalizing the trial design based on discussions with the FDA and other regulatory authorities. Any guidance we receive from the FDA or other regulatory authorities is subject to change. These regulatory authorities could change their positions at any time,

including their positions on the acceptability of our trial designs or the clinical endpoints or populations selected, which may require us to complete additional clinical trials or impose stricter approval conditions than we currently expect. Successful completion of our clinical trials is a prerequisite to submitting a New Drug Application, or NDA, to the FDA and a Marketing Authorization Application, or MAA, to the European Medicines Agency, or EMA, or Medicines and Healthcare Products Regulatory Agency, or MHRA, for each drug candidate and, consequently, the ultimate approval and commercial marketing of each drug candidate. We do not know whether any of our future clinical trials will begin on time or ever be completed on schedule, if at all.

If we are required to conduct additional clinical trials or other testing of our drug candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our drug candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approvals for our drug candidates;
- not obtain marketing approvals at all;
- obtain approvals for indications or patient populations that are not as broad as intended or desired or that impose label restrictions or warnings or risk mitigation requirements;
- be subject to post-marketing testing requirements; or
- have products removed from the market after obtaining marketing approval.

Clinical development is a lengthy and expensive process, with an uncertain outcome.

It is impossible to predict when or if any of our drug candidates will prove effective and safe in humans or will receive regulatory approval. To obtain marketing approval from regulatory authorities for the sale of any drug candidate, we must complete preclinical studies and then conduct extensive clinical trials to demonstrate the safety and efficacy of our drug candidates in humans. We may accelerate from cell models in our drug discovery platform directly to patients without validating results through animal studies, or validate them in animal studies at the same time as we conduct Phase 1 clinical trials. This approach could pose additional risks to our success because the effect of certain of our drug candidates on diseases has not been tested in animals prior to testing in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete, and is uncertain as to outcome. A failure of one or more clinical trials can occur at any stage of testing. The outcome of preclinical development testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their drug candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their drug candidates or adequate payor reimbursement for approved products. Our preclinical studies and future clinical trials may not be successful.

From time to time, we may publish interim top-line or preliminary data from our clinical trials. Interim data from clinical trials are subject to the risk that one or more of the clinical outcomes may materially change as enrollment of participants continues and more data become available. Preliminary or top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim and preliminary data should be viewed with caution until the final data are available. Adverse differences between preliminary or interim data and final data could significantly harm our business prospects.

We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our drug candidates.

We may experience delays in completing our preclinical studies and initiating or completing clinical trials, and we may experience numerous unforeseen events during, or as a result of, any future clinical trials that we could conduct that could delay or prevent our ability to receive marketing approval or commercialize our drug candidates, including:

- regulators or Institutional Review Boards, or IRBs, or ethics committees may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- we may experience delays in reaching, or fail to reach, agreement on acceptable terms with prospective trial sites and prospective Contract Research Organizations, or CROs, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;

- clinical trials of our drug candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional preclinical studies or clinical trials or we may decide to abandon product development programs;
- the number of participants required for clinical trials of our drug 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 fail to return for post-treatment follow-up at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or to meet their contractual obligations to us in a timely manner, or at all, or may deviate from the clinical trial protocol or drop out of the trial, which may require that we add new clinical trial sites or investigators;
- we may elect to, or regulators or IRBs or ethics committees may require us or our investigators to, 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;
- the cost of clinical trials of our drug candidates may be greater than we anticipate;
- the supply or quality of our drug candidates or other materials necessary to conduct clinical trials of our drug candidates may be insufficient or inadequate;
- delays in the manufacturing of our drug candidates; and
- our drug candidates may have undesirable side effects or other unexpected characteristics, causing us or our investigators, regulators, or IRBs or ethics committees to suspend or terminate the trials, or reports may arise from preclinical or clinical testing of other therapies that raise safety, efficacy, or other concerns about our drug candidates.

We could encounter delays if a clinical trial is suspended or terminated by us, by the IRBs or ethics committees of the institutions at which such trials are being conducted, by the Data Safety Monitoring Board for such a trial, or by the FDA or other regulatory authorities. Regulatory authorities may impose a suspension or termination or clinical hold due to a number of factors, such as failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product, changes in governmental regulations or administrative actions, or lack of adequate funding to continue the clinical trial. Many of the factors that could cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our drug candidates. Further, the FDA may disagree with our clinical trial design and our interpretation of data from clinical trials or may change the requirements for approval even after it has reviewed and commented on the design for our clinical trials.

Our product development costs will also increase if we experience delays in testing or regulatory approvals. We do not know whether any of our future clinical trials will begin as planned, or whether any of our current or future clinical trials will need to be restructured or will be completed on schedule, if at all. Significant preclinical study or clinical trial delays, including those caused by the COVID-19 pandemic, also could shorten any periods during which we may have the exclusive right to commercialize our drug candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize our drug candidates and may harm our business and results of operations. Any delays in our preclinical or future clinical development programs may harm our business, financial condition, and prospects significantly.

If we experience delays or difficulties in the enrollment of patients in clinical trials, our receipt of necessary regulatory approvals could be delayed or prevented.

We may not be able to initiate or continue clinical trials for current or future drug candidates if we are unable to locate and enroll a sufficient number of eligible participants in these trials as required by the FDA or similar regulatory authorities outside the United States. Our ability to enroll eligible participants may be limited or may result in slower enrollment than we anticipate. In addition, competitors may initiate or have ongoing clinical trials for drug candidates that treat the same indications as our current or future drug candidates, and participants who would otherwise be eligible for our clinical trials may instead enroll in our competitors' clinical trials. Furthermore, our ability to enroll participants may be delayed by the evolving COVID-19 pandemic and we do not know the extent and scope of such delays at this point.

In addition to the competitive trial environment, the eligibility criteria of our planned clinical trials will further limit the pool of available study participants as we will require that participants have specific characteristics, such as rare diseases connected to our drug candidates, which also may make enrollment challenging. Additionally, the process of finding potential participants may prove costly. We also may not be able to identify, recruit, and enroll a sufficient

number of participants to complete our clinical studies because of the perceived risks and benefits of the drug candidates under study, the availability and efficacy of competing therapies and clinical trials, the proximity and availability of clinical trial sites for prospective participants, and the referral practices of physicians. If people are unwilling to participate in our studies for any reason, the timeline for recruiting participants, conducting studies, and obtaining regulatory approval of potential products may be delayed.

Clinical trial enrollment may be affected by other factors including:

- the severity of the disease under investigation;
- the eligibility criteria for the clinical trial in question;
- the availability of an appropriate genomic screening test;
- the perceived risks and benefits of the drug candidate under study;
- the efforts to facilitate timely enrollment in clinical trials;
- the referral practices of physicians;
- the ability to monitor participants adequately during and after the trial;
- the proximity and availability of clinical trial sites for prospective participants;
- factors we may not be able to control, such as current or potential pandemics that may limit the availability of participants, principal investigators, study staff, or clinical sites, such as the outbreak of COVID-19;
- referral practices of physicians;
- ability to monitor participants adequately during and after the trial;
- ability to recruit clinical trial investigators with the appropriate competencies and experience;
- our ability to maintain participant informed consent and privacy; and
- the risk that enrolled participants will not complete a clinical trial.

Our planned clinical trials or those of our potential future collaborators may reveal significant adverse events not seen in our preclinical or nonclinical studies and may result in a safety profile that could inhibit regulatory approval or market acceptance of any of our drug candidates.

Before obtaining regulatory approvals for the commercial sale of any products, we must demonstrate through lengthy, complex, and expensive preclinical studies and clinical trials that our drug candidates are both safe and effective for use in each target indication. Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our drug candidates may not be predictive of the results of later-stage clinical trials. In addition, initial success in clinical trials may not be indicative of results obtained when such trials are completed. There is typically an extremely high rate of attrition from the failure of drug candidates proceeding through clinical trials. Drug candidates in later stages of clinical trials also may fail to show the desired safety and efficacy profile despite having progressed through nonclinical studies and initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. Most drug candidates that commence clinical trials are never approved as products and there can be no assurance that any of our current or future clinical trials will ultimately be successful or support further clinical development of any of our drug candidates.

We may develop future drug candidates, in combination with one or more disease therapies. The uncertainty resulting from the use of our drug candidates in combination with other disease therapies may make it difficult to accurately predict side effects in future clinical trials.

As is the case with many treatments for rare diseases and other conditions, there have been, and it is likely that there may be, side effects associated with the use of our drug candidates. If significant adverse events or other side effects are observed in any of our current or future drug candidates, we may have difficulty recruiting participants in our clinical trials, they may drop out of our trials, or we may be required to abandon the trials or our development efforts of one or more drug candidates altogether. We, the FDA or other applicable regulatory authorities, or an IRB may suspend or terminate clinical trials of a drug candidate at any time for various reasons, including a belief that subjects in such trials are being exposed to unacceptable health risks or adverse side effects. Some potential therapeutics developed in the biotechnology industry that initially showed therapeutic promise in early-stage trials have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude the product from obtaining or maintaining marketing approval, undesirable side effects may inhibit market

acceptance of the approved product due to its tolerability versus other therapies. Any of these developments could materially harm our business, financial condition, and prospects.

We may in the future conduct clinical trials for our drug candidates outside the United States, and the FDA and similar foreign regulatory authorities may not accept data from such trials.

We may in the future choose to conduct additional clinical trials outside the United States, including in Australia, Europe, Asia, or other foreign jurisdictions. FDA acceptance of trial data from clinical trials conducted outside the United States may be subject to certain conditions. In cases where data from clinical trials conducted outside the United States are intended to serve as the sole basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless i) the data are applicable to the United States population and United States medical practice; ii) the trials were performed by clinical investigators of recognized competence and iii) the data may be considered valid without the need for an on-site inspection by the FDA or, if the FDA considers such an inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. Additionally, the FDA's clinical trial requirements, including large enough size of trial populations and statistical powering, must be met. Many foreign regulatory bodies have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any similar foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. If the FDA or any similar foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our drug candidates not receiving approval or clearance for commercialization in the applicable jurisdiction.

Following the United Kingdom's departure from the EU on January 31, 2020, and the end of the a "transition period" on December 31, 2020, the EU and the United Kingdom have entered into a trade and cooperation agreement which governs certain aspects of their future relationship, including by ensuring tariff-free trade for certain goods and services. Since the regulatory framework for pharmaceutical products in the United Kingdom relating to quality, safety and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales and distribution of pharmaceutical products is derived from EU directives and regulations, Brexit will materially impact the future regulatory regime which applies to products and the approval of drug candidates in the United Kingdom. Longer term, the United Kingdom is likely to develop its own legislation that diverges from that in the EU.

The incidence and prevalence for target patient populations of our drug candidates have not been established with precision. If the market opportunities for our drug candidates are smaller than we estimate or if any approval that we obtain is based on a narrower definition of the patient population, our revenue and ability to achieve profitability will be adversely affected, possibly materially.

Even if approved for commercial sale, the total addressable market for our drug candidates will ultimately depend upon, among other things, the diagnosis criteria included in the final label, if our drug candidates are approved for these indications, acceptance by the medical community and patient access, product pricing and reimbursement. The number of patients targeted by our drug candidates may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our products, or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business. We may not be successful in our efforts to identify additional drug candidates. Due to our limited resources and access to capital, we must prioritize development of certain drug candidates, which may prove to be the wrong choice and may adversely affect our business.

Although we intend to explore other therapeutic opportunities, in addition to the drug candidates that we are currently developing, we may fail to identify viable new drug candidates for clinical development for a number of reasons. If we fail to identify additional potential drug candidates, our business could be materially harmed.

Research programs to pursue the development of our existing and planned drug candidates for additional indications and to identify new drug candidates and disease targets require substantial technical, financial, and human resources whether or not they are ultimately successful. For example, pursuant to our Research Collaboration and Option Agreement with Bayer AG, or the Bayer Agreement, we collaborate with Bayer AG, or Bayer, to develop various projects related to fibrosis. There can be no assurance that we will find potential targets using this approach, that any such targets will be tractable, or that such clinical validations will be successful. Our

research programs may initially show promise in identifying potential indications and/or drug candidates, yet fail to yield results for clinical development for a number of reasons, including:

- the research methodology used may not be successful in identifying potential indications and/or drug candidates, including as a result of the limited patient sample represented in our databases and the validity of extrapolating based on insights from a particular cellular context that may not apply to other more relevant cellular contexts;
- potential drug candidates may, after further study, be shown to have harmful adverse effects or other characteristics that indicate they are unlikely to be effective products; or
- it may take greater human and financial resources than we will possess to identify additional therapeutic opportunities for our drug candidates or to develop suitable potential drug candidates through internal research programs, thereby limiting our ability to develop, diversify and expand our product portfolio.

Because we have limited financial and human resources, we will have to prioritize and focus on certain research programs, drug candidates and target indications while forgoing others. As a result, we may forgo or delay pursuit of opportunities with other drug candidates or for other indications that later prove to have greater commercial potential or a greater likelihood of success. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities.

Accordingly, there can be no assurance that we will ever be able to identify additional therapeutic opportunities for our drug candidates or to develop suitable potential drug candidates through internal research programs, which could materially adversely affect our future growth and prospects. We may focus our efforts and resources on potential drug candidates or other potential programs that ultimately prove to be unsuccessful.

If we are not able to obtain, or if there are delays in obtaining, required regulatory approvals for our drug candidates, we will not be able to commercialize, or will be delayed in commercializing, our drug candidates, and our ability to generate revenue will be materially impaired.

Our drug candidates and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, distribution, import and export are subject to comprehensive regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. Before we can commercialize any of our drug candidates, we must obtain marketing approval. Currently, all of our drug candidates are in development, and we have not received approval to market any of our drug candidates from regulatory authorities in any jurisdiction. It is possible that our drug candidates, including any drug candidates we may seek to develop in the future, will never obtain regulatory approval. We have only limited experience in filing and supporting applications to regulatory authorities and expect to rely on CROs and/or regulatory consultants to assist us in this process. Securing regulatory approval requires the submission of extensive preclinical and clinical data and supporting information to the various regulatory authorities for each therapeutic indication to establish the drug candidate's safety and efficacy. Securing regulatory approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority. Our drug candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. In addition, regulatory authorities may find fault with our manufacturing process or facilities or that of third-party contract manufacturers. We may also face greater than expected difficulty in manufacturing our drug candidates.

The process of obtaining regulatory approvals, both in the United States and abroad, is expensive and often takes many years. If the FDA or a comparable foreign regulatory authority requires that we perform additional preclinical or clinical trials, approval, if obtained at all, may be delayed. The length of such a delay varies substantially based upon a variety of factors, including the type, complexity and novelty of the drug candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted NDA, 510(k), Premarket Approval Application, or PMA, or equivalent application types, may cause delays in the approval or rejection of an application. The FDA and comparable authorities in other countries have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical, or other studies. Our drug candidates could be delayed in receiving, or fail to receive, regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may not be able to enroll a sufficient number of patients in our clinical studies;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a drug candidate is safe and effective for its proposed indication or a related companion diagnostic is suitable to identify appropriate patient populations;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a drug candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our drug candidates may not be sufficient or of sufficient quality to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may find deficiencies with or fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may significantly change such that our clinical or manufacturing data are insufficient for approval.

Even if we were to obtain approval, regulatory authorities may approve any of our drug candidates for fewer or more limited indications than we request, thereby narrowing the commercial potential of the drug candidate. In addition, regulatory authorities may grant approval contingent on the performance of costly post-marketing clinical trials or may approve a drug candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that drug candidate. Any of the foregoing scenarios could materially harm the commercial prospects for our drug candidates.

If we experience delays in obtaining approval or if we fail to obtain approval of our drug candidates, the commercial prospects for our drug candidates may be harmed and our ability to generate revenues will be materially impaired.

We may never realize return on our investment of resources and cash in our drug discovery collaborations.

We conduct drug discovery activities for or with collaborators who are engaged in drug discovery and development. These collaborators include pre-commercial biotechnology companies and large pharmaceutical companies. When we engage in drug discovery with these collaborators, we typically provide the benefit of our platform and platform experts who identify molecules that have activity against one or more specified targets. In consideration, we have received equity investments, upfront fees, and/or the right to receive option fees, cash milestone payments upon the achievement of specified development, regulatory, commercial sales milestones for the drug discovery targets, and potential royalties.

We may never realize a longer-term return on our investment of resources and cash in our drug discovery collaborations. Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. Our drug discovery collaborators may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of any drug candidates. In addition, our ability to realize returns from our drug discovery collaborations is subject to the following risks:

- drug discovery collaborators have significant discretion in determining the amount and timing of efforts and resources that they will apply to our collaborations and may not perform their obligations as expected;
- drug discovery collaborators may not pursue development or commercialization of any drug candidates for which we are entitled to option fees, milestone payments, or royalties or may elect not to continue or renew development or commercialization programs based on results of clinical trials or other studies, changes in the collaborator's strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- drug discovery collaborators may delay clinical trials for which we are entitled to milestone payments;
- we may not have access to, or may be restricted from disclosing, certain information regarding our collaborators' drug candidates being developed or commercialized and, consequently, may have limited

ability to inform our stockholders about the status of, and likelihood of achieving, milestone payments or royalties under such collaborations;
- drug discovery collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with any drug candidates and products for which we are entitled to milestone payments or royalties and the collaborator may believe that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive;
- drug candidates discovered in drug discovery collaborations with us may be viewed by our collaborators as competitive with their own drug candidates or products, which may cause our collaborators to cease to devote resources to the commercialization of any such drug candidates;
- existing drug discovery collaborators and potential future drug discovery collaborators may begin to perceive us to be a competitor more generally, particularly as we advance our internal drug discovery programs, and therefore may be unwilling to continue existing collaborations with us or to enter into new collaborations with us;
- a drug discovery collaborator may fail to comply with applicable regulatory requirements regarding the development, manufacture, distribution, or marketing of a drug candidate or product, which may impact our ability to receive milestone payments;
- disagreements with drug discovery collaborators, including disagreements over intellectual property or proprietary rights, contract interpretation, or the preferred course of development, might cause delays or terminations of the research, development, or commercialization of drug candidates for which we are eligible to receive milestone payments, or might result in litigation or arbitration;
- drug discovery collaborators may not properly obtain, maintain, enforce, defend or protect our intellectual property or proprietary rights or may use our proprietary information in such a way as to potentially lead to disputes or legal proceedings that could jeopardize or invalidate our or their intellectual property or proprietary rights or expose us and them to potential litigation;
- drug discovery collaborators may infringe, misappropriate, or otherwise violate the intellectual property or proprietary rights of third parties, which may expose us to litigation and potential liability; and
- drug discovery collaborations may be terminated prior to our receipt of any significant value from the collaboration.

Our drug discovery collaborations may not lead to development or commercialization of drug candidates that results in our receipt of option fees, milestone payments, or royalties or other payments in a timely manner, or at all. For example, we may be over-reliant on our partners to provide information for molecules that we in-license. The molecules that we in-license may not be well protected because the composition of matter patents that once protected them have expired. Moreover, we may have difficulty obtaining the quality and quantity of active pharmaceutical ingredient, or API, or be able to ensure the stability of the molecule, all of which is needed to conduct clinical trials or bring a drug candidate to market. For those molecules that we are attempting to repurpose for other indications, our partners may have not have sufficient data, poor quality data or be able to help us interpret data, any of which could cause our collaboration to fail.

If any drug discovery collaborations that we enter into do not result in the successful development and commercialization of drug products that result in option fees, milestone payments, or royalties or other payments to us, we may not receive return on the resources we have invested in such drug discovery collaborations. Moreover, even if a drug discovery collaboration initially leads to the achievement of milestones that result in payments to us, it may not continue to do so.

We face substantial competition, which may result in others discovering, developing, or commercializing products before or more successfully than we do.

The development and commercialization of new products in the biopharmaceutical and related industries is highly competitive. There are other companies focusing on technology-enabled drug discovery to identify and develop NCEs and KCEs. Some of these competitive companies are based on scientific approaches that are the same as or similar to our approach, and others are based on entirely different approaches. These companies include divisions of large pharmaceutical companies and biotechnology companies of various sizes. We face competition with respect to our current drug candidates and will face competition with respect to any drug candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. 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.

Any drug candidates that we successfully develop and commercialize will compete with currently approved therapies and new therapies that may become available in the future from segments of the pharmaceutical, biotechnology and other related industries that pursue new therapeutics. Key product features that would affect our ability to effectively compete with other therapeutics include the efficacy, safety, and convenience of our products. We believe principal competitive factors to our business include, among other things, the accuracy of our computations and predictions, ability to integrate experimental and computational capabilities, ability to successfully transition research programs into clinical development, ability to raise capital, and the scalability of the platform, pipeline, and business.

Many of the companies that we compete against or against which we 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 pharmaceutical, biotechnology and diagnostic industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient recruitment for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. In addition, we cannot predict whether our current competitive advantages and our software tools, will remain in place and evolve appropriately as barriers to entry in the future. If not, other companies may be able to more directly or effectively compete with us.

Our commercial opportunity 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 more convenient or are less expensive than any products that we or our collaborators may develop. Our competitors also may obtain FDA or other regulatory 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 or our collaborators are able to enter the market. The key competitive factors affecting the success of all of our drug candidates, if approved, are likely to be their efficacy, safety, convenience, price, the level of generic competition and the availability of reimbursement from government and other third-party payors. ***Because we have multiple programs and drug candidates in our development pipeline and are pursuing a variety of target indications and treatment modalities, we may expend our limited resources to pursue a particular drug candidate and fail to capitalize on development opportunities or drug candidates that may be more profitable or for which there is a greater likelihood of success.***

We currently focus on the development of drug candidates regardless of the treatment modality or the particular target indication. Because we have limited financial and personnel resources, we may forgo or delay pursuit of opportunities with potential target indications or drug candidates that later prove to have greater commercial potential than our current and planned development programs and drug candidates. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and other future drug candidates for specific indications may not yield any commercially viable future drug candidates.

We and our collaborators may not achieve projected discovery and development milestones and other anticipated key events in the time frames that we or they announce, which could have an adverse impact on our business and could cause our stock price to decline.

From time to time, we expect that we will make public statements regarding the expected timing of certain milestones and key events, such as the commencement and completion of preclinical and clinical studies in our internal drug discovery programs as well developments and milestones under our collaborations. Our collaborators, such as Bayer, have also made public statements regarding expectations for the development of programs under collaboration with us and may in the future make additional statements about their goals and expectations for collaborations with us. The actual timing of these events can vary dramatically due to a number of factors such as delays or failures in our or our current and future collaborators' drug discovery and development programs, the amount of time, effort, and resources committed by us and our current and future collaborators, and the numerous

uncertainties inherent in the development of drugs. As a result, there can be no assurance that our or our current and future collaborators' programs will advance or be completed in the time frames we or they announce or expect. If we or any collaborators fail to achieve one or more of these milestones or other key events as planned, our business could be materially adversely affected, and the price of our Class A common stock could decline.

Risks Related to our Platform and Data

Our business and operations would suffer in the event of computer system failures, cyber-attacks, or deficiencies in our or third parties' cybersecurity.

We are increasingly dependent upon information technology systems, infrastructure, and data to operate our business. In the ordinary course of business, we collect, store, and transmit confidential information (including but not limited to intellectual property, proprietary business information, personal information, and other confidential information). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of this information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third-party vendors and other contractors and consultants who have access to our confidential information.

Given our limited operating history, we are still in the process of implementing our internal security and business continuity measures and developing our information technology infrastructure. Our internal computer systems and those of current and future third parties on which we rely may fail and are vulnerable to damage from computer viruses and unauthorized access. Our information technology and other internal infrastructure systems, including corporate firewalls, servers, data center facilities that we colocate in, lab equipment, leased lines, and connection to the Internet, face the risk of breakdown or other damage or interruption from service interruptions, system malfunction, natural disasters, terrorism, war and telecommunication and electrical failures, as well as security breaches from inadvertent or intentional actions by our employees, contractors, consultants, business partners, and/or other third parties, or from cyber-attacks by malicious third parties (including the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information), each of which could compromise our system infrastructure or lead to the loss, destruction, alteration, disclosure, or dissemination of, or damage or unauthorized access to, our data or data that is processed or maintained on our behalf, or other assets.

If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our development programs and our business operations, and could result in financial, legal, business, and reputational harm to us. For example, one of our primary differentiators is our proprietary technical information and biological and chemical data. The loss, corruption, unavailability of, or damage to our data would interfere with and undermine the insights we draw from our platform, which could result in the waste of resources on insights based on flawed premises. In addition, the loss or corruption of, or other damage to, clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on third parties for the manufacture of our drug candidates or any future drug candidates and to conduct clinical trials, and similar events relating to their systems and operations could also have a material adverse effect on our business and lead to regulatory agency actions. The risk of a security breach or disruption, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity, and sophistication of attempted attacks and intrusions from around the world have increased. Sophisticated cyber attackers (including foreign adversaries engaged in industrial espionage) are skilled at adapting to existing security technology and developing new methods of gaining access to organizations' sensitive business data, which could result in the loss of proprietary information, including trade secrets. We may not be able to anticipate all types of security threats, and we may not be able to implement preventive measures effective against all such security threats. For example, third parties have in the past and may in the future illegally pirate our software and make that software publicly available on peer-to-peer file sharing networks or otherwise. The techniques used by cyber criminals change frequently, may not be recognized until launched, and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations, or hostile foreign governments or agencies. In addition, in response to the ongoing COVID-19 pandemic, the majority of our workforce is currently working remotely. This could increase our cybersecurity risk, create data accessibility concerns, and make us more susceptible to communication disruptions.

Any security breach or other event that leads to loss, damage, or unauthorized access to, or use, alteration, or disclosure or dissemination of, personal information, including personal information regarding clinical trial subjects, contractors, directors, or employees, our intellectual property, proprietary business information, or other confidential or proprietary information, could harm our reputation directly, enable competitors to compete with us more effectively, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to mandatory corrective action and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information, which could result in significant legal and financial exposure and reputational damage that could potentially have an adverse effect on our business. Notifications and follow-up actions related to a security incident could impact our reputation, and we could incur substantial costs, including legal and remediation costs, in connection with these measures and otherwise in connection with any actual or suspected security breach. We expect to incur significant costs in an effort to detect and prevent security incidents and otherwise implement our internal security and business continuity measures, and actual, potential, or anticipated attacks may cause us to incur increasing costs, including costs to deploy additional personnel and protection technologies, train employees, and engage third-party experts and consultants. We may face increased costs and find it necessary or appropriate to expend substantial resources in the event of an actual or perceived security breach.

The costs related to significant security breaches or disruptions could be material and our insurance policies may not be adequate to compensate us for the potential losses arising from any such disruption in, or failure or security breach of, our systems or third-party systems where information important to our business operations or commercial development is stored or processed. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all. Further, our insurance may not cover all claims made against us and could have high deductibles in any event, and defending a suit, regardless of its merit, could be costly and divert management attention. Furthermore, if the information technology systems of our third-party vendors and other contractors and consultants become subject to disruptions or security breaches, we may have insufficient recourse against such third parties and we may have to expend significant resources to mitigate the impact of such an event, and to develop and implement protections to prevent future events of this nature from occurring.

If we are not able to develop new solutions and enhancements to our platform that keep pace with technological developments, our business and results of operations would be harmed.

Our ability to increase revenue depends in large part on our ability to enhance and improve our platform. The success of any enhancement to our platform depends on several factors, including the generation of additional biological and chemical data, innovation in hardware solutions, increased computational storage and processing capacity and development of more advanced algorithms. Any new enhancement that we develop may not be introduced in a timely or cost-effective manner, may contain errors, vulnerabilities or bugs, or may not achieve the functionality necessary to generate significant revenue. If we are unable to successfully develop new innovations, enhance our existing platform, or otherwise gain market acceptance, our reputation, business, results of operations, and financial condition would be harmed. Our success also depends on our ability to identify important and emerging use cases and quickly develop new and effective innovations to address those use cases.

We have invested and expect to continue to invest in research and development efforts that further enhance our platform. Such investments may affect our operating results, and, if the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.

We have invested and expect to continue to invest in research and development efforts that further enhance our platform. These investments may involve significant time, risks, and uncertainties, including the risk that the expenses associated with these investments may affect our margins and operating results and that such investments may not generate sufficient revenues to offset liabilities assumed and expenses associated with these new investments. The software industry changes rapidly as a result of technological and product developments, which may render our solutions less effective. We believe that we must continue to invest a significant amount of time and resources in our platform to maintain and improve our competitive position. If we do not achieve the benefits anticipated from these investments, if the achievement of these benefits is delayed, our business, operating results and prospects may be materially adversely affected.

Defects or disruptions in our platform could result in diminishing our value and prospects.

Our platform depends upon the continuous, effective, and reliable operation of our software, hardware, databases, and related tools and functions and the integrity of our data. Our proprietary software tools, hardware, and data sets are inherently complex and may contain defects or errors. Errors may result from the interface of our proprietary software and hardware tools with our data or third-party systems and data, which we did not develop. The risk of errors is particularly significant when new software or hardware is first introduced or when new versions or enhancements of existing software or hardware are implemented. We have from time to time found defects in our software and hardware, and new errors in our existing software and hardware may be detected in the future. Any errors, defects, disruptions, or other performance problems with our software, hardware, or data sets could hurt our ability to gather valuable insights that drive our drug discoveries. Furthermore, our platform may produce an incomplete data set lacking in coverage which could result in a material adverse effect on our ability to discover new drug candidates. Such discovery is dependent on the integrity and completeness of our data. The occurrence of any of these events could result in diminishing value of our platform and data and have a material adverse effect on our business, operating results and prospects.

We rely upon third-party providers of cloud-based infrastructure to host our platforms. Any disruption in the operations of these third-party providers, limitations on capacity, or interference with our use could adversely affect our business, financial condition, and results of operations.

We outsource substantially all of the technological infrastructure relating to our hosted platform to third-party hosting services, such as Google Cloud and Amazon Web Services, or AWS. We have no control over any of these third parties, and while we attempt to reduce risk by minimizing reliance on any single third party or its operations, we cannot guarantee that such third-party providers will not experience system interruptions, outages or delays, or deterioration in their performance. We need to be able to access our computational platform at any time, without interruption or degradation of performance. Our hosted platform depends on protecting the virtual cloud infrastructure hosted by third-party hosting services by maintaining its configuration, architecture, features, and interconnection specifications, as well as protecting the information stored in these virtual data centers, which is transmitted by third-party Internet service providers. We have experienced, and expect that in the future we may again experience interruptions, delays and outages in service and availability from time to time due to a variety of factors, including infrastructure changes, human or software errors, website hosting disruptions and capacity constraints. Any limitation on the capacity of our third-party hosting services could adversely affect our business, financial condition, and results of operations. In addition, any incident affecting our third-party hosting services' infrastructure that may be caused by cyber-attacks, natural disasters, fire, flood, severe storm, earthquake, power loss, telecommunications failures, terrorist or other attacks, and other disruptive events beyond our control could negatively affect our cloud-based solutions. A prolonged service disruption affecting our cloud-based solutions could damage our reputation or otherwise harm our business. We may also incur significant costs for using alternative equipment or taking other actions in preparation for, or in reaction to, events that damage the third-party hosting services we use.

In the event that our service agreements with our third-party hosting services are terminated, or there is a lapse of service, elimination of services or features that we utilize, interruption of Internet service provider connectivity, or damage to such facilities, we could experience interruptions in access to the our platform as well as significant delays and additional expense in arranging or creating new facilities and services and/or re-architecting our hosted software solutions for deployment on a different cloud infrastructure service provider, which could adversely affect our business, financial condition, and results of operations.

If our security measures are breached or unauthorized access to our other data is otherwise obtained, our data may be perceived as not being secure and we may incur significant liabilities.

We use a set of proprietary tools to generate, analyze, and derive novel insights from our data. As a result, unauthorized access to or security breaches of our data, as a result of third-party action, employee or contractor error, malfeasance, or otherwise could result in the loss or corruption of, or other damage to information, claims and litigation, indemnity obligations, damage to our reputation, and other liability. Our collaborators and other third parties we work with may also suffer similar security breaches of data that we rely on. Because the techniques used to obtain unauthorized access or sabotage systems change frequently and generally are not identified until they are launched against a target, we and those we collaborate with may be unable to anticipate these techniques or implement adequate preventative measures. In addition, if our employees or contractors fail to adhere to practices we have established to maintain a firewall between our internal drug discovery team and our teams that work with external individuals, including our collaborators, or if the technical solutions we have adopted to maintain the firewall

malfunction, our collaborators may lose confidence in our ability to maintain the confidentiality of their intellectual property, we may have trouble attracting new collaborators, we may be subject to breach of contract claims by our collaborators, and we may suffer reputational and other harm as a result. Any or all of these issues could result in reputational damage or subject us to third-party lawsuits or other action or liability, which could adversely affect our operating results. Our insurance may not be adequate to cover losses associated with such events, and in any case, such insurance may not cover all of the types of costs, expenses, and losses we could incur to respond to and remediate a security breach. For more information see “Risk Factors—Our business and operations would suffer in the event of computer system failures, cyber-attacks or deficiencies in our or third parties’ cyber security.”

Our solutions utilize third-party open source software, and any failure to comply with the terms of one or more of these open source software licenses could adversely affect our business, subject us to litigation, or create potential liability.

Our solutions include software licensed by third parties under any one or more open source licenses, including the Apache 2.0 License, MIT, BSD variants, and others, and we expect to continue to incorporate open source software in our solutions in the future. Moreover, we cannot ensure that we have effectively monitored our use of open source software, or validated the quality or source of such software, or that we are in compliance with the terms of the applicable open source licenses or our current policies and procedures. There have been claims against companies that use open source software in their products and services asserting that the use of such open source software infringes the claimants’ intellectual property rights. As a result, we could be subject to suits by third parties claiming that what we believe to be licensed open source software infringes such third parties’ intellectual property rights. Additionally, if an author or other third party that distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages and required to comply with onerous conditions or restrictions on these solutions, which could disrupt the distribution and sale of these solutions. Litigation could be costly for us to defend, have a negative effect on our business, financial condition, and results of operations, or require us to devote additional research and development resources to change our solutions. Furthermore, these third-party open source providers could experience service outages, data loss, privacy breaches, cyber-attacks, and other events relating to the applications and services they provide that could diminish the utility of these services and which could harm our business as a result.

Use of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code, including with respect to security vulnerabilities where open source software may be more susceptible. In addition, certain open source licenses require that source code for software programs that interact with such open source software be made available to the public at no cost and that any modifications or derivative works to such open source software continue to be licensed under the same terms as the open source software license. The terms of various open source licenses to which we are subject have not been interpreted by courts in the relevant jurisdictions, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to market or provide our software and data. By the terms of certain open source licenses, we could be required to release the source code of our proprietary software, and to make our proprietary software available under open source licenses, if we combine our proprietary software with open source software in a certain manner. In the event that portions of our proprietary software are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, re-engineer all or a portion of our solutions, or otherwise be limited in the licensing of our solutions, each of which could reduce or eliminate the value of our solutions. Disclosing our proprietary source code could allow our competitors to create similar products with lower development effort and time and ultimately could result in a loss of sales. Furthermore, any such re-engineering or other remedial efforts could require significant additional research and development resources, and we may not be able to successfully complete any such re-engineering or other remedial efforts. Any of these events could create liability for us and damage our reputation, which could have a material adverse effect on our revenue, business, results of operations, and financial condition and the market price of our shares.

Risks Related to Our Operations/Commercialization

Our insurance policies are expensive and protect us only from some business risks, which leaves us exposed to significant uninsured liabilities.

We do not carry insurance for all categories of risk that our business may encounter and insurance coverage is becoming increasingly expensive. For example, we can only obtain insurance for the loss of our data that would partially compensate us for its loss. We do not know if we will be able to maintain existing insurance with adequate levels of coverage in the future, and any liability insurance coverage we acquire in the future may not be sufficient to reimburse us for any expenses or losses we may suffer. If we obtain marketing approval for any drug candidates that we or our collaborators may develop, we intend to acquire insurance coverage to include the sale of commercial products, but we may be unable to obtain such insurance on commercially reasonable terms or in adequate amounts. The coverage or coverage limits currently maintained under our insurance policies may not be adequate. If our losses exceed our insurance coverage, our financial condition would be adversely affected. Clinical trials or regulatory approvals for any of our drug candidates could be suspended, which could adversely affect our results of operations and business, including by preventing or limiting the development and commercialization of any drug candidates that we or our collaborators may identify. Additionally, operating as a public company will make it more expensive for us to obtain directors and officers liability insurance. If we do not have adequate levels of directors and officers liability insurance, it may be more difficult for us to attract and retain qualified individuals to serve on our board of directors.

A pandemic, epidemic, or outbreak of an infectious disease, such as COVID-19, may materially and adversely affect our business and our financial results and could cause a disruption to the development of our drug candidates.
Public health crises such as pandemics or similar outbreaks could adversely impact our business. In early 2020, a novel strain of a virus named SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2), or coronavirus, which causes COVID-19 has spread to most countries across the world and all 50 states within the U.S. including Utah and specifically Salt Lake City, where our primary office and laboratory space is located. The coronavirus pandemic is evolving, and to date has led to the implementation of various responses, including government-imposed quarantines, travel restrictions and other public health safety measures. The extent to which the coronavirus impacts our operations or those of our third-party partners, including our preclinical studies or clinical trial operations, will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information that will emerge concerning the severity of coronavirus infection and the actions to contain the coronavirus or treat its impact, among others. The continued spread of COVID-19 globally, or the evolution of a new variant of COVID-19 that is more contagious, has more severe effects or is resistant to treatments or vaccinations, could adversely impact our preclinical or clinical trial operations in the U.S., including our ability to recruit and retain trial participants as well as principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID-19 if an outbreak occurs in their geography. For example, similar to other biopharmaceutical companies, we may experience delays in initiating preclinical and clinical studies, protocol deviations, enrolling our clinical trials, or dosing of patients in our clinical trials as well as in activating new trial sites. COVID-19 or any variants may also affect employees of third-party CROs located in affected geographies that we rely upon to carry out our clinical trials. In addition, as a result of medical complications associated with the diseases of the patients we seek to enroll and treat in our trials, the patient populations that our lead and other drug candidates target may be particularly susceptible to COVID-19 or any variants, which may make it more difficult for us to identify individuals able to enroll in our current and future clinical trials and may impact the ability of those enrolled to complete any such trials. Any negative impact COVID-19 or any variants has on enrollment or the execution of our drug trials could cause costly delays, which could adversely affect our ability to obtain regulatory approval for and to commercialize our drug candidates, increase our operating expenses, and have a material adverse effect on our financial results.

Additionally, timely enrollment in planned clinical trials is dependent upon clinical trial sites which could be adversely affected by global health issues, such as pandemics. We plan to conduct clinical trials for our drug candidates in geographies which are currently being affected by the coronavirus. Some factors from the coronavirus outbreak that will delay or otherwise adversely affect enrollment in the clinical trials of our drug candidates, as well as our business generally, include:

- the potential diversion of healthcare resources away from the conduct of clinical trials to focus on pandemic concerns, including the attention of physicians serving as our clinical trial investigators, hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our prospective clinical trials;
- limitations on travel that could interrupt key trial and business activities, such as clinical trial site initiations and monitoring, domestic and international travel by employees, contractors or patients to clinical trial sites, including any government-imposed travel restrictions or quarantines that will impact

the ability or willingness of patients, employees or contractors to travel to our clinical trial sites or secure visas or entry permissions, a loss of face-to-face meetings and other interactions with potential partners, any of which could delay or adversely impact the conduct or progress of our prospective clinical trials;
- the potential negative effect on the operations of our third-party manufacturers;
- interruptions in global shipping affecting the transport of clinical trial materials, such as tissue samples, investigational drug product and comparator drugs and other supplies used in our studies; and
- business disruptions caused by potential workplace, laboratory and office closures and an increased reliance on employees working from home, disruptions to or delays in ongoing laboratory experiments and operations, staffing shortages, travel limitations or mass transit disruptions, any of which could adversely impact our business operations or delay necessary interactions with local regulators, ethics committees and other important agencies and contractors.

We have taken temporary precautionary measures intended to help minimize the risk of the coronavirus to our employees, including temporarily permitting certain employees to work remotely, suspending all non-essential travel worldwide for our employees and discouraging employee attendance at industry events and in-person work-related meetings, which could negatively affect our business. We cannot presently predict the scope and severity of the planned and potential shutdowns or disruptions of businesses and government agencies, such as the Securities and Exchange Commission, or the SEC, or FDA.

These and other factors arising from the coronavirus could worsen in countries that are already afflicted with the coronavirus or could continue to spread to additional countries. Any of these factors, and other factors related to any such disruptions that are unforeseen, could have a material adverse effect on our business and our results of operation and financial condition. Further, uncertainty around these and related issues could lead to adverse effects on the economy of the United States and other economies, which could impact our ability to raise the necessary capital needed to develop and commercialize our drug candidates.

If we fail to sufficiently manage and improve our technical hardware infrastructure we may experience errors, delays and other performance problems.

We have experienced significant growth in the complexity of our data and the software tools that our hardware infrastructure supports. In addition, we need to properly manage and improve our technological hardware infrastructure in order to support changes in hardware and software parameters and the evolution of our tools. We have experienced, and may in the future experience, disruptions, outages, failures and other performance problems with our software tools or hardware infrastructure. These types of problems may be caused by a variety of factors, including infrastructure changes, human, mechanical, or software errors, viruses, security attacks, and fraud. In some instances, we may not be able to identify the cause or causes of these problems within an acceptable period of time or at all. If we do not accurately predict and identify our infrastructure requirements and failures, including acquisition of newer infrastructure, our team may experience performance problems that may cause delays in our research and development programs, which could adversely affect our business, financial condition, results of operations, and prospects.

Even if any drug candidates we develop receive marketing approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors, and others in the medical community necessary for commercial success.

The commercial success of our drug candidates will depend upon their degree of market acceptance by physicians, patients, third-party payors, and others in the medical community. Even if any drug candidates we may develop receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors, and others in the medical community. The degree of market acceptance of any drug candidates we may develop, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of such drug candidates as demonstrated in pivotal clinical trials and published in peer-reviewed journals;
- the potential and perceived advantages compared to alternative treatments, including any similar generic treatments;
- the ability to offer these products for sale at competitive prices;
- the ability to offer appropriate patient access programs, such as co-pay assistance;

- convenience and ease of dosing and administration compared to alternative treatments;
- the clinical indications for which the drug candidate is approved by FDA or comparable regulatory agencies;
- product labeling or product insert requirements of the FDA or other comparable foreign regulatory authorities, including any limitations, contraindications or warnings contained in a product's approved labeling;
- restrictions on how the product is distributed;
- the timing of market introduction of competitive products;
- publicity concerning these products or competing products and treatments;
- the strength of marketing and distribution support;
- favorable third-party coverage and sufficient reimbursement; and
- the prevalence and severity of any side effects or adverse events.

Sales of medical products also depend on the willingness of physicians to prescribe the treatment, which is likely to be based on a determination by these physicians that the products are safe, therapeutically effective and cost effective. In addition, the inclusion or exclusion of products from treatment guidelines established by various physician groups and the viewpoints of influential physicians can affect the willingness of other physicians to prescribe the treatment. We cannot predict whether physicians, physicians' organizations, hospitals, other healthcare providers, government agencies or private insurers will determine that any product we may develop is safe, therapeutically effective and cost effective as compared with competing treatments. If any drug candidates we develop do not achieve an adequate level of acceptance, we may not generate significant product revenue, and we may not become profitable.

If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any drug candidates we may develop, we may not be successful in commercializing those drug candidates if and when they are approved.

We do not have a sales or marketing infrastructure and have little experience in the sale, marketing, or distribution of pharmaceutical products. To achieve commercial success for any approved product for which we retain sales and marketing responsibilities, we must either develop a sales and marketing organization, sales and marketing software solutions, or outsource these functions to third parties. In the future, we may choose to build a focused sales, marketing, and commercial support infrastructure to market and sell our drug candidates, if and when they are approved. We may also elect to enter into collaborations or strategic partnerships with third parties to engage in commercialization activities with respect to selected drug candidates, indications or geographic territories, including territories outside the United States, although there is no guarantee we will be able to enter into these arrangements even if the intent is to do so.

There are risks involved with both establishing our own commercial capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force or reimbursement specialists is expensive and time consuming and could delay any product launch. If the commercial launch of a drug candidate for which we recruit a sales force and establish marketing and other commercialization capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition commercialization personnel.

Factors that may inhibit our efforts to commercialize any approved product on our own include:

- the inability to recruit and retain adequate numbers of effective sales, marketing, reimbursement, customer service, medical affairs, and other support personnel;
- the inability of sales personnel or software tools to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future approved products;
- the inability of reimbursement professionals to negotiate arrangements for formulary access, reimbursement, and other acceptance by payors;
- the inability to price products at a sufficient price point to ensure an adequate and attractive level of profitability;
- restricted or closed distribution channels that make it difficult to distribute our products to segments of the patient population;
- 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 commercialization organization.

If we enter into arrangements with third parties to perform sales, marketing, commercial support, and distribution services, our product revenue or the profitability of product revenue may be lower than if we were to market and sell any products we may develop internally. In addition, we may not be successful in entering into arrangements with third parties to commercialize our drug candidates or may be unable to do so on terms that are favorable to us or them. We may have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively or may expose us to legal and regulatory risk by not adhering to regulatory requirements and restrictions governing the sale and promotion of prescription drug products, including those restricting off-label promotion. If we do not establish commercialization capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our drug candidates, if approved.

As our drug development pipeline increases and matures, the increased demand for clinical and commercial supplies from our facilities and third parties may impact our ability to operate. We will require increased capacity across our entire supply chain. Furthermore, we rely on many service providers, including those that provide manufacturing or testing services, all of whom have inherent risks in their operations that may adversely impact our operations.

We currently utilize, and expect to continue to utilize, third parties to, among other things, manufacture raw materials, components, parts, and consumables, and to perform quality testing, including such materials for our automated robotics platform. If the field of technology-enabled drug discovery continues to expand, we may encounter increasing competition for these materials and services. Demand for third-party manufacturing or testing facilities may grow at a faster rate than their existing capacity, which could disrupt our ability to find and retain third-party suppliers and manufacturers capable of producing sufficient quantities of such raw materials, components, parts, and consumables required for our drug candidates and to maintain our automated robotics platform. The use of service providers and suppliers could expose us to risks, including, but not limited to:

- termination or non-renewal of supply and service agreements with third parties in a manner or at a time that is costly or damaging to us;
- disruptions to the operations of these suppliers and service providers caused by conditions unrelated to our business or operations, including the bankruptcy of the supplier or service provider or force majeure events, such as the COVID-19 pandemic; and
- inspections of third-party facilities by regulatory authorities that could have a negative outcome and result in delays to or termination of their ability to supply our requirements.

Additional risks to our automated robotics platform include reliance on third-party equipment and instrument suppliers and consumable and reagent suppliers. The failure of third-party suppliers to fulfill our needs could adversely affect our ability to continue to operate our drug discovery platform and generate new insights that lead to successful drug candidates.

We are subject to regulatory and operational risks associated with the physical and digital infrastructure at both our internal facilities and those of our external service providers.

Our facilities in Salt Lake City, Utah have not been reviewed or pre-approved by any regulatory agency, nor has the facility been inspected by any Federal regulatory agency such as the FDA. An inspection by the FDA could disrupt our ability to generate data and develop drug candidates. Our laboratory facilities are designed to incorporate a significant level of automation of equipment with integration of several digital systems to improve efficiency of research operations. We have attempted to achieve a high level of digitization for a research operation relative to industry standards. While this is meant to improve operational efficiency, this may pose additional risk of equipment malfunction and even overall system failure or shutdown due to internal or external factors including, but not limited to, design issues, system compatibility, or potential cybersecurity breaches. This may lead to delay in potential drug candidate identification or shutdown of our facility. Any disruption in our data generation capabilities could cause delays in advancing new drug candidates into our pipeline, advancing existing programs, or enhancing the capabilities of our platform, including expanding our data, the occurrence of which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

In the future, we may manufacture drug substances or products for preclinical and clinical use at our facilities and we have limited prior manufacturing experience.

If, in the future, we decide to produce drug substances or products, we will have no prior experience producing it at our facilities for preclinical and clinical use. We could incur delays in implementing the full operational state of the facility, causing delays to preclinical or clinical supply or need to rely on third-party service providers, resulting in unplanned expenses.

As we expand our development and commercial capacity, we may establish manufacturing capabilities inside the Salt Lake City footprint or expand to other locations or geographies, which may lead to regulatory delays or prove costly. If we fail to select the correct location, complete the construction in an efficient manner, recruit the appropriate personnel, and generally manage our growth effectively, the development and production of our investigational medicines could be delayed or curtailed. Additional investments may be needed if changes in our manufacturing process lead to required changes in the facility's infrastructure.

Our current operations are located in Utah and California; and we or the third parties upon whom we depend may be adversely affected by natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our current operations are located in Salt Lake City, Utah and Milpitas, California. Any unplanned event, such as flood, fire, explosion, earthquake, extreme weather condition, medical epidemics, including any potential effects from the current global spread of COVID-19, power shortage, telecommunication failure or other natural or man-made accidents or incidents that result in us being unable to fully utilize our facilities, or the manufacturing facilities of our third-party contract manufacturers, may have a material and adverse effect on our ability to operate our business and have significant negative consequences on our financial and operating conditions. Loss of access to these facilities may result in increased costs, delays in the development of our drug candidates or interruption of our business operations. Natural disasters or pandemics such as the COVID-19 outbreak could further disrupt our operations, and have a material and adverse effect on our business, financial condition, results of operations and prospects. For example, we have instituted a temporary work from home policy for non-essential office personnel and it is possible that this could have a negative impact on the execution of our business plans and operations, especially because we rely on validating some of the drug discovery biology in our wet lab. Furthermore, our wet lab houses the robots used to produce our dataset that builds the Recursion Data Universe which is a key means by which we conduct drug candidate discovery. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters or the datacenter where we collocate our GPU cluster, or damaged critical infrastructure or our robots, such as our research facilities or the manufacturing facilities of our third-party contract manufacturers, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event.

Furthermore, we do not have a disaster recovery and business continuity plan for systems related to chemistry. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business. As part of our risk management policy, we maintain insurance coverage at levels that we believe are appropriate for our business. However, in the event of an accident or incident at these facilities, we cannot assure our investors that the amounts of insurance will be sufficient to satisfy any damages and losses. If our facilities or the manufacturing facilities of our third-party contract manufacturers are unable to operate because of an accident or incident or for any other reason, even for a short period of time, any or all of our research and development programs may be harmed. Any business interruption may have a material and adverse effect on our business, financial condition, results of operations and prospects.

Furthermore, our facilities in Salt Lake City, Utah are located in a busy downtown area. Although we believe we have taken the necessary steps to ensure our operations are safe to the surrounding area, there could be a risk to the public if we were to conduct hazardous material research, including use of flammable chemicals and materials, at our facilities. To date, we have not received any complaints from the public associated with our operations. From time to time, we also hold public events in our Salt Lake City facilities. We have protocols in place to protect our facilities and the confidential information and assets inside; however, it is difficult to secure certain portions of our facilities and security of our confidential and proprietary information could be compromised. Despite the steps we have taken, the surrounding community may still perceive our facility as unsafe, which could have a material and adverse effect on our reputation and operations.

If we fail to comply with environmental, health and safety, or other laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety, and other laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. 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 generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. 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 us for 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, hazardous or radioactive materials.

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

Under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change," which is generally defined as a greater than 50% change by value in the ownership of its equity over a three-year period, our ability to use our pre-change net operating loss carryforwards and certain other pre-change tax attributes to offset its post-change income could be subject to an annual limitation. Such annual limitation could result in the expiration of a portion of the net operating loss carryforward before utilization. If not utilized the carryforwards will begin to expire in 2036. We may have experienced such ownership changes in the past, and we may experience ownership changes in the future as a result of our initial public offering or subsequent shifts in our stock ownership, some of which are outside of our control; however, we have not determined whether an ownership change has occurred. As of December 31, 2020, we had federal net operating loss carryforwards of approximately $193.8million, and our ability to utilize those net operating loss carryforwards could be limited by enacted legislation or an "ownership change" as described above, which could result in increased tax liability to us.

If our estimates or judgments relating to our critical accounting policies prove to be incorrect or financial reporting standards or interpretations change, our results of operations could be adversely affected.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States, or U.S. GAAP, requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience, known trends and events, and various other factors that we believe to be reasonable under the circumstances, as provided in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Use of Estimates." The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include stock-based compensation and valuation of our equity investments in early-stage biotechnology companies. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our Class A common stock.

Additionally, we regularly monitor our compliance with applicable financial reporting standards and review new pronouncements and drafts thereof that are relevant to us. As a result of new standards, changes to existing standards and changes in their interpretation, we might be required to change our accounting policies, alter our operational policies, and implement new or enhance existing systems so that they reflect new or amended financial reporting standards, or we may be required to restate our published financial statements. Such changes to existing standards or changes in their interpretation may have an adverse effect on our reputation, business, financial position, and profit.

Risks Related to Our Reliance on Third Parties

We expect to rely on third parties to conduct our clinical trials and some aspects of our research and preclinical testing, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research, or testing.

We currently rely and expect to continue to rely on third parties, such as clinical research organizations, clinical data management organizations, medical institutions, and clinical investigators, to conduct some aspects of research and preclinical testing and clinical trials. Any of these third parties may terminate their engagements with us or be unable to fulfill their contractual obligations. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative third parties on commercially reasonable terms, or at all. If we need to enter into alternative arrangements, it would delay product development activities.

Our reliance on these third parties for research and development activities reduces control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our respective clinical trials is conducted in accordance with the general investigational plan and protocols for the trial and applicable legal, regulatory, and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. In addition, the FDA and comparable foreign regulatory authorities require compliance with good clinical practices, or GCP guidelines, for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible, reproducible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. Regulatory authorities enforce GCP compliance through periodic inspections of trial sponsors, principal investigators, and trial sites. If we or any of these third parties fail to comply with applicable GCP regulations, some or all of the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional nonclinical or clinical trials or to enroll additional patients before approving our marketing applications. We cannot be certain that, upon inspection, such regulatory authorities will determine that any of our clinical trials complies with the GCP regulations. For any violations of laws and regulations during the conduct of clinical trials, we could be subject to untitled and warning letters or enforcement action that may include civil penalties up to and including criminal prosecution. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database within certain timeframes. Failure to do so can result in fines, adverse publicity, and civil and criminal sanctions.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or conduct clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for any drug candidates we may develop and will not be able to, or may be delayed in our efforts to, successfully commercialize our medicines. Our failure or the failure of these third parties to comply with applicable regulatory requirements or our stated protocols could also subject us to enforcement action.

We contract with third parties for the manufacture of our drug candidates for preclinical development, clinical testing, and expect to continue to do so for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our drug candidates or products or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not currently own or operate any manufacturing facilities or personnel, although we are in the process of securing a facility to establish production capabilities for preclinical animal studies and early human clinical trials. We rely, and could expect to continue to rely, on third parties for the manufacture of many of our drug candidates for preclinical development and clinical testing, as well as for the commercial manufacture of our products if any of our drug candidates receive marketing approval. This reliance on third parties increases the risk that we will not have sufficient quantities of our drug candidates or products or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.

The facilities used by our contract manufacturers to manufacture our drug candidates must be inspected by the FDA pursuant to pre-approval inspections that will be conducted after we submit our marketing applications to the FDA. We do not control the manufacturing process of, and will be completely dependent on, our contract manufacturers for compliance with current good manufacturing practice guidelines, or cGMP, in connection with the manufacture of our drug candidates in the near to intermediate term or possibly long term. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the

FDA or others, they will not be able to pass regulatory inspections and/or maintain regulatory compliance for their manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority finds deficiencies with or does not approve these facilities for the manufacture of our drug candidates or if it finds deficiencies or 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 drug candidates, if approved. Further, our failure, or the failure of our third- party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of drug candidates or products, if approved, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect our business and supplies of our drug candidates. Our third-party manufacturers may be subject to third-party litigation which could disrupt our supply chain, result in liability and harm our business, including the need to increase prices in connection with the commercialization of future drug candidates.

We may be unable to establish any agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- reliance on the third party for regulatory compliance and quality assurance;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of our proprietary information, including our trade secrets and know-how; and
- the possible termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Our drug candidates and any products that we may develop may compete with other drug candidates and approved products for access to manufacturing facilities or capacity. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval. If our current contract manufacturers cannot perform as agreed, we may be required to replace such manufacturers. We may incur added costs and delays in identifying and qualifying any such replacement.

Our current and anticipated future dependence upon others for the manufacture of our drug candidates or products may adversely affect our future profit margins and our ability to commercialize any products that receive marketing approval on a timely and competitive basis. We also expect to rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of any drug candidates we may develop or commercialization of our medicines, producing additional losses and depriving us of potential product revenue.

The third parties upon whom we rely for certain equipment and the supply of the active pharmaceutical ingredients used in our drug candidates are our only source of supply, and the loss of any of these suppliers could significantly harm our business.

Certain of our specialized equipment and the active pharmaceutical ingredients, or API, used in our drug candidates are supplied to us from single-source suppliers. Our ability to successfully develop our drug candidates, and to ultimately supply our commercial products in quantities sufficient to meet the market demand, depends in part on our ability to obtain equipment and the API for these products in accordance with regulatory requirements and in sufficient quantities for clinical testing and commercialization. We do not currently have arrangements in place for a redundant or second-source supply of any such equipment or API in the event any of our current suppliers of such equipment or API ceases their operations for any reason. We are also unable to predict how changing global economic conditions or potential global health concerns such as the COVID-19 pandemic will affect our third-party suppliers and manufacturers. Any negative impact of such matters on our third-party suppliers and manufacturers may also have an adverse impact on our results of operations or financial condition.

For all of our drug candidates, we intend to identify and qualify additional vendors and manufacturers to provide such equipment or API prior to submission of an NDA to the FDA and/or an MAA to the EMA. We are not certain,

however, that our single-source suppliers will be able to meet our demand for their products, either because of the nature of our agreements with those suppliers, our limited experience with those suppliers or our relative importance as a customer to those suppliers. It may be difficult for us to assess their ability to timely meet our demand in the future based on past performance. While our suppliers have generally met our demand for their products on a timely basis in the past, they may subordinate our needs in the future to their other customers.

Establishing additional or replacement suppliers for certain equipment and the API used in our drug candidates, if required, may not be accomplished quickly. If we are able to find a replacement supplier, such replacement supplier would need to be qualified and may require additional regulatory inspection or approval, which could result in further delay. While we seek to maintain adequate inventory of the API used in our drug candidates, any interruption or delay in the supply of components or materials, or our inability to obtain such API from alternate sources at acceptable prices in a timely manner could impede, delay, limit or prevent our development efforts, which could harm our business, results of operations, financial condition and prospects.

We may seek to establish additional collaborations for clinical development or commercialization of our drug candidates, and, if we are not able to establish them on commercially reasonable terms, or at all, we may have to alter our development and commercialization plans.

Our product development programs and the potential commercialization of our drug candidates will require substantial additional cash to fund expenses. For some of our drug candidates, we may decide to collaborate with additional pharmaceutical and biotechnology companies for the development and potential commercialization of those drug candidates. In the near term, the value of our company will depend in part, on the number of and the quality of the collaborations that we create.

Potential collaborators may reject collaborations based upon their assessment of our financial, regulatory or intellectual property position. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon 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. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject drug candidate, the costs and complexities of manufacturing and delivering such drug candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge and industry and market conditions generally. The collaborator may also consider alternative drug candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our drug candidate. The terms of any additional collaborations or other arrangements that we may establish may not be favorable to us.

Collaborative relationships with third parties could cause us to expend significant resources and incur substantial business risk with no assurance of financial return. Management of our relationships with collaborators will require:

- significant time and effort from our management team;
- coordination of our marketing and research and development programs with the marketing and research and development priorities of our collaborators; and
- effective allocation of our resources to multiple projects.

If we are unable to establish or maintain such strategic collaborations on terms favorable to us in the future, our research and development efforts and potential to generate revenue may be limited.

We may also be restricted under collaboration agreements from entering into future agreements on certain terms with potential collaborators. Collaborations are complex and time-consuming to negotiate and document. In addition, the significant number of recent business combinations among large pharmaceutical companies has resulted in a reduced number of potential future collaborators.

We may not be able to negotiate additional collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of the drug candidate for which we are seeking to collaborate, 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 increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional

capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our drug candidates or bring them to market and generate product revenue. Even if we successfully establish new collaborations, these relationships may never result in the successful development or commercialization of drug candidates or the generation of sales revenue. The success of our collaboration arrangements will depend heavily 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 collaborations. To the extent that we enter into collaborative arrangements, the related product revenues are likely to be lower than if we directly marketed and sold products. Such collaborators may also consider alternative drug candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for any future drug candidate. Disagreements between parties to a collaboration arrangement regarding clinical development or commercialization matters can lead to delays in the development process or commercialization of the applicable drug candidate and, in some cases, the termination of the collaboration arrangement. These disagreements can be difficult to resolve if neither of the parties has final decision-making authority. Collaborations with pharmaceutical or biotechnology companies or other third parties often are terminated or allowed to expire by the other party. Any such termination or expiration would adversely affect us financially and could harm our business reputation. If we were to become involved in arbitration or litigation with any of our collaborators it would consume time and divert management resources away from operations, damage our reputation and impact our ability to enter into future collaboration agreements and may result in substantial payments from us to our collaborators to settle any disputes.

Risks Related to Our Intellectual Property

If we are unable to adequately protect and enforce our intellectual property and proprietary technology or obtain and maintain patent protection for our technology and products or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully commercialize our technology and products may be impaired.

Our commercial success will depend in part on our ability to obtain, maintain, protect and enforce our proprietary and intellectual property rights in the United States and other countries for our drug candidates, and our core technologies, including our phenomic platform, preclinical and clinical assets, composition of matter, methods of use and formulation patents and related know-how. We seek to protect our proprietary and intellectual property position by, among other methods, filing patent applications in the United States and abroad related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business. However, the patent process is expensive, time consuming and complex, and we may not be able to apply for patents on certain aspects of our technology and products in a timely fashion, at a reasonable cost, in all jurisdictions or at all, and any potential patent coverage we obtain may not be sufficient to prevent substantial competition. In addition, we also rely on trade secrets, know-how and continuing technological innovation to develop and maintain our proprietary and intellectual property position. We do not own or in-license any issued patents with respect to certain of our programs, including our REC-3599 product candidate, our lead molecules for the treatment of C. difficile colitis (REC-163964, REC-164014, and REC-164067), our lead molecules for the treatment of neuroinflammation (REC-648455, REC-648597, and REC-648677), our lead molecules for the treatment of Batten disease (REC-648190, REC-259618, and REC-648647), or the lead molecules for the treatment of CMT2A (REC-64810, REC-648458, REC-1262, and REC-150357), REC-64151 for the treatment of STK11-mutant immune checkpoint resistance in non-small cell lung cancer and MYC inhibitory molecules for the treatment of solid and hematological malignancies we can provide no assurance that any of our current or future patent applications will result in issued patents or that any issued patents will provide us with any competitive advantage.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation.

The degree of patent protection we require to successfully commercialize our drug candidates may be unavailable or severely limited in some cases and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot provide any assurances that any of our pending patent applications will issue, or that any of our pending patent applications that mature into issued patents will include claims with a scope sufficient to protect our drug candidates from competition. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, and many companies have encountered significant challenges in establishing and enforcing their proprietary rights outside of the United States. Furthermore, patents have a

limited lifespan. In the United States, the natural expiration of a patent is generally twenty years after its first effective non-provisional filing date. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new drug candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned patent portfolio and any patent portfolio we may license in the future may not provide us with adequate and continuing patent protection sufficient to exclude others from commercializing products similar or identical to our drug candidates, including generic versions of such products.

Other parties have developed technologies that may be related or competitive to our own, and such parties may have filed or may file patent applications, or may have received or may receive patents, claiming inventions that may overlap or conflict with those claimed in our own patent. Publications of discoveries in scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot know with certainty whether we or our licensors were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights cannot be predicted with any certainty.

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. Further, with respect to most of the pending patent applications covering our drug candidates, prosecution has yet to commence. Patent prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the U.S. Patent and Trademark Office, or USPTO, may be significantly narrowed by the time they issue, if at all. It is also possible that we will fail to identify patentable aspects of our research and development output in time to obtain patent protection. Moreover, in some circumstances, we do not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from third parties. We may also require the cooperation of our licensors and collaborators to enforce any licensed patent rights, and such cooperation may not be provided. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

We currently own a number of U.S. provisional patent applications. U.S. provisional patent applications are not eligible to become issued patents until, among other things, we file a non-provisional patent application within 12 months of filing one or more of our related provisional patent applications. With regard to such U.S. provisional patent applications, if we do not timely file any non-provisional patent applications, we may lose our priority dates with respect to our provisional patent applications and any patent protection on the inventions disclosed in our provisional patent applications. Further, in the event that we do timely file non-provisional patent applications relating to our provisional patent applications, we cannot predict whether any such patent applications will result in the issuance of patents or if such issued patents will provide us with any competitive advantage.

Even if we acquire patent protection that we expect should enable us to maintain such competitive advantage, third parties may challenge the validity, enforceability or scope thereof, which may result in such patents being narrowed, invalidated or held unenforceable. The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. For example, we may be subject to a third-party submission of prior art to the USPTO challenging the priority of an invention claimed within one of our patents, which submissions may also be made prior to a patent’s issuance, precluding the granting of any of our pending patent applications. Further, inadvertent or intentional public disclosures of our inventions prior to the filing of a patent application have precluded, and in the future may preclude us from obtaining patent protection in certain jurisdictions. We may become involved in opposition, derivation, reexamination, inter parties review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others from whom we have obtained licenses to such rights. Such proceedings could result in revocation of or amendment to our patents in such a way that they no longer cover our technology or drug candidates.

Competitors may claim that they invented the inventions claimed in our issued patents or patent applications prior to us, or may file patent applications before we do. Competitors may also claim that we are infringing on their patents and that we therefore cannot practice our technology as claimed under our patents, if issued. Competitors may also contest our patents, if issued, by showing the patent examiner that the invention was not original, was not novel or

was obvious. In litigation, a competitor could claim that our patents, if issued, are not valid for a number of reasons. If a court agrees, we would lose our rights to those challenged patents.

In addition, we may in the future be subject to claims by our former employees or consultants asserting an ownership right in our patents or patent applications, as a result of the work they performed on our behalf. Although we generally require all of our employees, consultants and advisors and any other third parties who have access to our proprietary know-how, information or technology to assign or grant similar rights to their inventions to us, we cannot be certain that we have executed such agreements with all parties who may have contributed to our intellectual property, nor can we be certain that our agreements with such parties will be upheld in the face of a potential challenge, or that they will not be breached, for which we may not have an adequate remedy. A loss of exclusivity, in whole or in part, could allow others to compete with us and harm our business.

An adverse determination in any such submission or proceeding may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, without payment to us, or could limit the duration of the patent protection covering our technology and drug candidates. Such challenges may also result in our inability to manufacture or commercialize our drug candidates without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future drug candidates.

Even if they are unchallenged, our owned patent portfolio and any patent portfolio we may license in the future may not provide us with any meaningful protection or prevent competitors from designing around our patent claims to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner. For example, a third party may develop a competitive product that provides benefits similar to one or more of our drug candidates but that has a different composition that falls outside the scope of our patent protection. If the patent protection provided by the patents and patent applications we hold or pursue with respect to our drug candidates is not sufficiently broad to impede such competition, our ability to successfully commercialize our drug candidates could be negatively affected, which would harm our business.

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

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application and prosecution process. In addition, periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or patent applications often must be paid to the USPTO and foreign patent agencies over the lifetime of the patent and/or patent application. While an unintentional lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we fail to maintain the patents and patent applications covering our products or procedures, we may not be able to stop a competitor from marketing products that are the same as or similar to our drug candidates, which would have a material adverse effect on our business.

If we are unable to protect the confidentiality of our trade secrets and know-how, our business and competitive position may be harmed.

In addition to the protection afforded by patents, we rely upon unpatented trade secret protection, unpatented know-how and continuing technological innovation to develop and maintain our competitive position. With respect to curating our data and our library of small molecules generally, we consider trade secrets and know-how to be our primary intellectual property. We seek to protect our proprietary technology and processes, in part, by entering into confidentiality agreements with our collaborators, scientific advisors, employees and consultants, and invention assignment agreements with our consultants and employees. We may not be able to prevent the unauthorized disclosure or use of information which we consider to be confidential, our technical know-how or other trade secrets

by the parties to these agreements, however, despite the existence generally of confidentiality agreements and other contractual restrictions. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. If any of the collaborators, scientific advisors, employees and consultants who are parties to these agreements breaches or violates the terms of any of these agreements, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets as a result. For example, if one of our employees publicly discloses information that we believe to be confidential or a trade secret we may be unable to protect it in the future. Even where remedies are available, enforcing a claim that a party illegally disclosed or misappropriated our trade secrets, like patent litigation, is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets.

Our trade secrets could otherwise become known or be independently discovered by our competitors. Competitors could purchase our drug candidates and attempt to replicate some or all of the competitive advantages we derive from our development efforts, willfully infringe our intellectual property rights, design around our protected technology or develop their own competitive technologies that fall outside of our intellectual property rights. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us.

Third parties may initiate legal proceedings alleging that we are infringing, misappropriating or otherwise violating their intellectual property or proprietary rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability and the ability of our collaborators to develop, manufacture, market and sell our drug candidates and use our proprietary technologies without infringing, misappropriating or otherwise violating the intellectual property or proprietary rights of third parties. The biotechnology and pharmaceutical industries are characterized by extensive and frequent litigation regarding patents and other intellectual property rights. For example, we sublicense CRISPR-Cas9 gene editing technology from a licensed vendor, which provides critical tools upon which portions of our drug discovery process relies, but there are ongoing disputes between third parties, which we are not party to, regarding the ownership of and licensing rights related to such technology. CRISPR-Cas9 gene editing is a field that is highly active for patent filings. In November 2018, it was reported that 211 patent families and 1835 patent family members worldwide referenced CRISPR or Cas in the title, abstracts or claims. The extensive patent filings related to CRISPR and Cas make it difficult for us to assess the full extent of relevant patents and pending applications that may cover CRISPR-Cas9. There may be third-party patents or pending patent applications with claims that may issue in the future, covering our use of CRISPR-Cas9. We may need access to such patents in order to continue using CRISPR-Cas9, however we cannot be certain that such patents will be available for license on commercially reasonable terms. We may in the future become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our drug candidates and technology, including interference proceedings before the USPTO. Our competitors or other third parties may assert infringement claims against us, alleging that our products or technologies are covered by their patents. Given the vast and continually-increasing number of patents in our field of technology, we cannot be certain that we do not infringe existing patents or that we will not infringe patents that may be granted in the future. Many companies have filed, and continue to file, patent applications related to artificial intelligence and deep learning, technology-aided drug discovery, CRISPR, high-throughput screening, and combinations of any or all of these fields. Some of these patent applications have already been allowed or issued, and others may issue in the future. Since these areas are competitive and of strong interest to pharmaceutical and biotechnology companies, there will likely be additional patent applications filed and additional patents granted in the future, as well as additional research and development programs expected in the future. If a patent holder believes our product or drug candidate infringes on its patent, the patent holder may sue us even if we have received patent protection for our technology. Moreover, we may face patent infringement claims from non-practicing entities that have no relevant product revenue and against whom our owned patent portfolio and any patent portfolio we may license in the future may thus have no deterrent effect. If any such claim or proceeding is brought against us, our collaborators or our third-party service providers, our development, manufacturing, marketing, sales and other commercialization activities could be similarly adversely affected. Even if we believe third-party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of infringement, validity, enforceability, or priority. A court of competent jurisdiction could hold that third-party patents asserted against us are valid, enforceable, and infringed, which could materially and adversely affect our ability to develop, manufacture, market, sell and commercialize any of our drug candidates or technology. In order to successfully challenge the validity of

any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent.

If we are found to infringe a third party's patent or other intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our drug candidates and technology. We may choose to obtain a license, even in the absence of an action or finding of infringement. In either case, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain such a license, it could be granted on non-exclusive terms, thereby providing our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing, royalty and other payments. Without such a license, we could be forced, including by court order, to cease developing and commercializing the infringing technology or drug candidates. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed such third-party patent or other intellectual property rights. A finding of infringement could prevent us from commercializing our drug candidates or force us to cease some of our business operations, which could materially harm our business. If we lose a foreign patent lawsuit, alleging our infringement of a competitor's patents, we could be prevented from marketing our products in one or more foreign countries, which would have a materially adverse effect on our business.

We may be subject to damages resulting from claims that we or our employees have wrongfully used or disclosed alleged trade secrets of our competitors or are in breach of non-competition or non-solicitation agreements with our competitors or claims asserting ownership of what we regard as our own intellectual property.

We could in the future be subject to claims that we or our employees have inadvertently or otherwise used or disclosed alleged trade secrets or other proprietary information of former employers or competitors. Although we try to ensure that our employees and consultants do not use the intellectual property, proprietary information, know-how or trade secrets of others in their work for us, we may in the future be subject to claims that we caused an employee to breach the terms of his or her non-competition or non-solicitation agreement, or that we or these individuals have, inadvertently or otherwise, used or disclosed the alleged trade secrets or other proprietary information of a former employer or competitor. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and could be a distraction to management. If our defenses to these claims fail, in addition to requiring us to pay monetary damages, a court could prohibit us from using technologies or features that are essential to our drug candidates, if such technologies or features are found to incorporate or be derived from the trade secrets or other proprietary information of the former employers. An inability to incorporate such technologies or features would have a material adverse effect on our business, and may prevent us from successfully commercializing our drug candidates. In addition, we may lose valuable intellectual property rights or personnel as a result of such claims. Moreover, any such litigation or the threat thereof may adversely affect our ability to hire employees or contract with independent sales representatives. A loss of key personnel or their work product could hamper or prevent our ability to commercialize our drug candidates, which would have an adverse effect on our business, results of operations and financial condition.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have an adverse effect on our business, results of operations and financial condition.

We may become involved in lawsuits to protect or enforce our patents and other intellectual property rights, which could be expensive, time consuming and unsuccessful.

Competitors and other third parties may infringe, misappropriate or otherwise violate our patents and other intellectual property rights. To counter infringement or unauthorized use, we may be required to file infringement claims. A court may disagree with our allegations, however, and may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover it. Further, such third parties could counterclaim

that we infringe their intellectual property or that a patent we have asserted against them is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims and inter partes reviews challenging the validity, enforceability or scope of asserted patents are commonplace. In addition, third parties may initiate legal proceedings against us to assert such challenges to our intellectual property rights. The outcome of any such proceeding is generally unpredictable. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Patents may be unenforceable if someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. It is possible that prior art of which we and the patent examiner were unaware during prosecution exists, which could render any patents that may issue invalid. Moreover, it is also possible that prior art may exist that we are aware of but do not believe is relevant to our future patents, should they issue, but that could nevertheless be determined to render our patents invalid.

An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated or interpreted narrowly. If a defendant were to prevail on a legal assertion of invalidity or unenforceability of our patents covering one of our drug candidates, we would lose at least part, and perhaps all, of the patent protection covering such drug candidate or technology. Competing products may also be sold in other countries in which our patent coverage might not exist or be as strong.

Intellectual property litigation could cause us to spend substantial resources and distract our personnel from their normal responsibilities.

Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally expensive and time consuming and is likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our Class A common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities.

We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating or from successfully challenging our intellectual property rights. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

We may not be able to effectively prosecute and enforce our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our drug candidates in all countries throughout the world would be prohibitively expensive. The requirements for patentability may differ in certain countries, particularly in developing countries. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. Patent protection must ultimately be sought on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries. Additionally, the patent laws of some foreign countries, including some jurisdictions of significant commercial interest, do not afford intellectual property protection to the same extent as the laws of the United States, particularly with regard to software technologies and methods of treatment involving existing drugs. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property rights. This could make it difficult for us to stop the infringement of our patents, if obtained, or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties and/or which limit the enforceability of patents against third parties, including government agencies or

government contractors. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States and, in those foreign countries, patents may provide limited or no benefit. In addition, we and our licensors may have limited remedies in those foreign countries if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents and could limit our potential revenue opportunities.

Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection, if our ability to enforce our patents to stop infringing activities is inadequate. These products may compete with our drug candidates, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and resources from other aspects of our business. Furthermore, while we intend to protect our intellectual property rights in the major markets for our drug candidates, we cannot ensure that we will be able to initiate or maintain similar efforts, or obtain similar patent scope, in all jurisdictions in which we may wish to market our drug candidates. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license.

If we do not obtain patent term extension and data exclusivity for any drug candidates we may develop, our business may be materially harmed.

Depending upon the timing, duration and specifics of any FDA marketing approval of any drug candidates we may develop, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Action of 1984, or Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent extension term of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval; only one patent may be extended and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our business, financial condition, results of operations and prospects could be materially harmed.

We may need to license certain intellectual property from third parties, and such licenses may not be available or may not be available on commercially reasonable terms.

A third party may hold intellectual property, including patent rights, that are important or necessary to the development of our products. It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our products, in which case we would be required to obtain a license from these third parties on commercially reasonable terms, or our business could be harmed, possibly materially. For example, when we explore repurposing molecules owned by our collaboration partners or other third parties, we in-license the rights to use those molecules for our use. If we were not able to obtain a license, or were not able to obtain a license on commercially reasonable terms or with sufficient breadth to cover the intended use of third-party intellectual property, our business could be materially harmed or we may become involved in disputes.

If we fail to comply with our obligations in the agreements under which we collaborate with or license intellectual property rights from third parties, or otherwise experience disruptions to our business relationships with our collaborators or licensors, we could lose rights that are important to our business.

We license certain intellectual property that is important to our business, and in the future we may enter into additional agreements that provide us with licenses to valuable intellectual property or technology. We expect our future license agreements will impose various development, diligence, commercialization, and other obligations on us in order to maintain the licenses. In spite of our efforts, a future licensor might conclude that we have materially breached our obligations under such license agreements and seek to terminate the license agreements, thereby removing or limiting our ability to develop and commercialize products and technology covered by these license

agreements. If these in-licenses are terminated, or if the underlying patent rights licensed thereunder fail to provide the intended exclusivity, competitors or other third parties would have the freedom to seek regulatory approval of, and to market, products identical to ours and we may be required to cease our development and commercialization of certain of our drug candidates. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

The agreements under which we may license intellectual property or technology from third parties may be complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected drug candidates, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects.

These and similar issues may arise with respect to our collaboration agreements, such as the Bayer Agreement. Our collaboration with Bayer is one of our key collaborations, and there can be no assurance that this collaboration will continue past the current term, on favorable terms or at all, or that at any time while the collaboration is in effect the parties will operate under the agreement without disputes. Possible disputes may involve ownership or control of intellectual property rights, negotiations of licensing agreements resulting from the collaboration, exclusivity obligations, diligence and payment obligations, for example.

Some of our intellectual property has been discovered through government funded programs and thus may be subject to federal regulations such as "march-in" rights, certain reporting requirements and a preference for U.S.-based companies, and compliance with such regulations may limit our exclusive rights and our ability to contract with non-U.S. manufacturers.

Our intellectual property rights may be subject to a reservation of rights by one or more third parties. For example, certain intellectual property rights that we have licensed have been generated through the use of U.S. government funding and are therefore subject to certain federal regulations. As a result, the U.S. government may have certain rights to intellectual property embodied in our current or future processes and related products and services pursuant to the Bayh-Dole Act of 1980, or the Bayh-Dole Act. These U.S. government rights include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U.S. government has the right, under certain limited circumstances, to require the licensor to grant exclusive, partially exclusive or non-exclusive licenses to any of these inventions to a third party if it determines that (1) adequate steps have not been taken to commercialize the invention and achieve practical application of the government-funded technology, (2) government action is necessary to meet public health or safety needs, (3) government action is necessary to meet requirements for public use under federal regulations or (4) we fail to meet requirements of federal regulations (also referred to as "march-in rights"). The U.S. government also has the right to take title to these inventions if we or our licensors fail to disclose the invention to the government or fail to file an application to register the intellectual property within specified time limits. These rights may permit the government to disclose our confidential information to third parties. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us to expend substantial resources. To the extent any of our future owned or licensed intellectual property is also generated through the use of U.S. government funding, the provisions of the Bayh-Dole Act may

similarly apply. Any exercise by the government of such rights could have a material adverse effect on our competitive position, business, results of operations and financial condition.

Changes to the patent law in the United States and other jurisdictions could diminish the value of patents in general and may impact the validity, scope or enforceability of our patent rights, thereby impairing our ability to protect our drug candidates.

As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve both technological and legal complexity and is therefore costly, time consuming, and inherently uncertain. Our patent rights, their associated costs, and the enforcement or defense of such patent rights may be affected by developments or uncertainty in the patent statute, patent case law or USPTO rules and regulations. Changes in either the patent laws or interpretation of the patent laws could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of our issued patents. For example, in March 2013, under the Leahy-Smith America Invents Act, or the America Invents Act, the United States transitioned from a “first to invent” to a “first-to-file” patent system. Under a “first-to-file” system, assuming that other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to a patent on an invention regardless of whether another inventor had made the invention earlier. A third party that files a patent application in the USPTO after March 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either file any patent application related to our technology or drug candidates or invent any of the inventions claimed in our or our licensor’s patents or patent applications. The America Invents Act also includes a number of other significant changes to U.S. patent law, including provisions that affect the way patent applications will be prosecuted, allowing third party submission of prior art and establishing a new post-grant review system including post-grant review, inter partes review, and derivation proceedings. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. The effects of these changes are currently unclear as the USPTO continues to promulgate new regulations and procedures in connection with the America Invents Act and many of the substantive changes to patent law, including the “first-to-file” provisions, only became effective in March 2013. In addition, the courts have yet to address many of these provisions and the applicability of the act and new regulations on the specific patents discussed in this filing have not been determined and would need to be reviewed. However, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. Additionally, there have been recent proposals for additional changes to the patent laws of the United States and other countries that, if adopted, could impact our ability to obtain patent protection for our proprietary technology or our ability to enforce rights in our proprietary technology. Depending on future actions by the U.S. Congress, the U.S. courts, the USPTO and the relevant law-making bodies in other countries, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce any patents that we may obtain in the future.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to our drug candidates or utilize similar technology but that are not covered by the claims of the patents that we license or may own;
- others may be able to duplicate or utilize similar technology in a manner that infringes our patents but is undetectable, or done in a jurisdiction where we cannot secure or enforce patent rights;

- we or our licensors or collaborators, might not have been the first to make the inventions covered by the issued patent or pending patent application that we license or own now or in the future;
- we or our licensors or collaborators, might not have been the first to file patent applications covering certain of our or their inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our owned or licensed intellectual property rights;
- it is possible that our present or future pending patent applications (whether owned or licensed) will not lead to issued patents;
- issued patents that we hold rights to may be held invalid or unenforceable, including as a result of legal challenges by our competitors or other third parties;
- our competitors or other third parties might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- the patents of others may harm our business; and
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations and prospects.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential collaborators or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and trade names by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, trade secrets, know-how, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our business, financial condition, results of operations and prospects.

We license patent rights from third-party owners. If such owners do not properly or successfully obtain, maintain, or enforce the patents underlying such licenses, our competitive position and business prospects may be harmed.

We are a party to license agreements that give us rights to third-party intellectual property that is necessary or useful for our business. For example, we have obtained licenses from third parties to patent rights covering a number of our clinical drug candidates and licenses (implied or explicit) from certain other parties for technology used in our drug discovery efforts. We may enter into additional license agreements to third-party intellectual property in the future.

Our success will depend in part on the ability of our licensors to obtain, maintain, and enforce patent protection for our licensed products. Our licensors may not successfully prosecute the patent applications we license. Even if patents issue in respect of these patent applications, our licensors may fail to maintain these patents, may determine not to pursue litigation against other companies that are infringing these patents, or may pursue such litigation less aggressively than we would. Without protection for the intellectual property we license, other

companies might be able to offer substantially identical products for sale, which could adversely affect our competitive business position and harm our business prospects.

Our current proprietary position for certain drug candidates depends upon our owned or in-licensed patent filings covering components of such drug candidates, manufacturing-related methods, formulations and/or methods of use, which may not adequately prevent a competitor or other third party from using the same drug candidate for the same or a different use.

Composition of matter patent protection is generally considered to be desirable for drug products because it provides protection without regard to any particular method of use or manufacture or formulation. For some of the molecules that we in-license from our collaboration partners, we cannot rely on composition of matter patent protection as the term on those patents has expired or is approximately expired.

Method of use patents protect the use of a product for the specified method and formulation patents cover formulations to deliver therapeutics. While we file applications covering method of use for our programs at appropriate times in the development process, we cannot be certain that claims in any future patents issuing from these applications will cover all commercially-relevant applications of molecules in competing uses. These types of patents do not prevent a competitor or other third party from developing, marketing or commercializing a similar or identical product for an indication that is outside the scope of the patented method or from developing a different formulation that is outside the scope of the patented formulation. Moreover, with respect to method of use patents, even if competitors or other third parties do not actively promote their product for our targeted indications or uses for which we may obtain patents, physicians may recommend that patients use these products off-label, or patients may do so themselves. Although off-label use may infringe or contribute to the infringement of method of use patents, the practice is common and this type of infringement is difficult to prevent or enforce. Consequently, we may not be able to prevent third parties from practicing our inventions in the United States or abroad. Additionally, some commercially-relevant jurisdictions do not allow for patents covering a new method of use of an otherwise-known molecule.

Risks Related to Government Regulation

Even if we receive regulatory approval for any of our drug candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense. Additionally, our drug candidates, if approved, could be subject to post-market study requirements, marketing and labeling restrictions, and even recall or market withdrawal if unanticipated safety issues are discovered following approval. In addition, we may be subject to penalties or other enforcement action if we fail to comply with regulatory requirements.

The FDA may not approve any of our drug candidates derived from our platform given our novel approach to drug discovery and may elect to inspect our automated robotics platform used to generate our data. However, if the FDA or a comparable foreign regulatory authority approves any of our drug candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping for the product will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, establishment registration and listing, as well as continued compliance with cGMPs and GCPs for any clinical trials that we conduct post-approval. Any regulatory approvals that we receive for our drug candidates may also be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing studies, and surveillance to monitor the safety and efficacy of the product. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- clinical trial holds
- fines, warning letters or other regulatory enforcement action;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us;
- product seizure or detention, or refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our drug candidates. If we are slow or unable to adapt to changes in existing requirements 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, which would adversely affect our business, prospects and ability to achieve or sustain profitability.

We may seek orphan drug designation for certain of our drug candidates, and we may be unsuccessful or may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.
As part of our business strategy, we may seek orphan drug designation for certain of our drug candidates, and we may be unsuccessful. Regulatory authorities in some jurisdictions, including the United States and Europe, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States, or a patient population of 200,000 or more in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers.

Similarly, in Europe, the European Commission, upon the recommendation of the EMA's Committee for Orphan Medicinal Products, grants orphan drug designation to promote the development of drugs that are intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions affecting not more than 5 in 10,000 persons in Europe and for which no satisfactory method of diagnosis, prevention, or treatment has been authorized (or the product would be a significant benefit to those affected). Additionally, designation is granted for drugs intended for the diagnosis, prevention, or treatment of a life-threatening, seriously debilitating or serious and chronic condition and when, without incentives, it is unlikely that sales of the drug in Europe would be sufficient to justify the necessary investment in developing the drug. In Europe, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers. Generally, if a drug with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the drug is entitled to a period of marketing exclusivity, which precludes the FDA or the EMA from approving another marketing application for the same drug and indication for that time period, except in limited circumstances. The applicable period is seven years in the United States and ten years in Europe. The European exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified.

Even if we obtain orphan drug exclusivity for a drug, that exclusivity may not effectively protect the drug from competition because different drugs can be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve a different drug for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. In addition, a designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. Moreover, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition or if another drug with the same active part of the molecule is determined to be safer, more effective, or represents a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process. While we may seek orphan drug designation for our drug candidates, we may never receive such designations. Even if we do receive such designations, there is no guarantee that we will enjoy the benefits of those designations.

Obtaining and maintaining regulatory approval of our drug candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our drug candidates in other jurisdictions.

We may also submit marketing applications in other countries. Regulatory authorities in jurisdictions outside of the United States have requirements for approval of drug candidates with which we must comply prior to marketing in those jurisdictions. For example, our trials consist of small patient populations to date and some international

regulatory filings may require larger patient populations. Obtaining foreign regulatory 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 drug candidates will be harmed.

Obtaining and maintaining regulatory approval of our drug candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval of a drug candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion of the drug candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the United States, including additional nonclinical studies or clinical trials as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In short, the foreign regulatory approval process involves all of the risks associated with FDA approval. In many jurisdictions outside the United States, a drug candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we may intend to charge for our products will also be subject to approval.

Laws and regulations governing any international operations we may have in the future may preclude us from developing, manufacturing and selling certain products outside of the United States and require us to develop and implement costly compliance programs.

If we expand our operations outside of the United States, we must dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate. The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with certain accounting provisions requiring the company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

Various laws, regulations and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our presence outside of the United States, it will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling certain products and drug candidates outside of the United States, which could limit our growth potential and increase our development costs.

The failure to comply with laws governing international business practices may result in substantial civil and criminal penalties and suspension or debarment from government contracting. The Securities and Exchange Commission, or SEC, also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions.

We are subject to certain U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations. We can face serious consequences for violations.

Among other matters, U.S. and foreign anti-corruption, anti-money laundering, export control, sanctions, and other trade laws and regulations, which are collectively referred to as Trade Laws, prohibit companies and their employees, agents, clinical research organizations, legal counsel, accountants, consultants, contractors, and other partners from authorizing, promising, offering, providing, soliciting, or receiving directly or indirectly, corrupt or

improper payments or anything else of value to or from recipients in the public or private sector. Violations of Trade Laws can result in substantial criminal fines and civil penalties, imprisonment, the loss of trade privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We also expect our non-U.S. activities to increase in time. We plan to engage third parties for clinical trials and/or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals and we can be held liable for the corrupt or other illegal activities of our personnel, agents, or partners, even if we do not explicitly authorize or have prior knowledge of such activities.

We may seek priority review designation for one or more of our other drug candidates, but we might not receive such designation, and even if we do, such designation may not lead to a faster regulatory review or approval process.

If the FDA determines that a drug candidate offers a treatment for a serious condition and, if approved, the product would provide a significant improvement in safety or effectiveness, the FDA may designate the drug candidate for priority review. A priority review designation means that the goal for the FDA to review an application is six months, rather than the standard review period of ten months. We may request priority review for our drug candidates. The FDA has broad discretion with respect to whether or not to grant priority review status to a drug candidate, so even if we believe a particular drug candidate is eligible for such designation or status, the FDA may decide not to grant it. Moreover, a priority review designation does not necessarily result in an expedited regulatory review or approval process or necessarily confer any advantage with respect to approval compared to conventional FDA procedures. Receiving priority review from the FDA does not guarantee approval within the six-month review cycle or at all.

Breakthrough therapy designation and fast track designation by the FDA, even if granted for any of our drug candidates, may not lead to a faster development, regulatory review or approval process, and each designation does not increase the likelihood that any of our drug candidates will receive marketing approval in the United States.

We may seek a breakthrough therapy designation for some of our drug candidates. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs designated as breakthrough therapies by the FDA may also be eligible for priority review and accelerated approval. Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe one of our drug candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a breakthrough therapy designation for a drug candidate may not result in a faster development process, review or approval compared to therapies considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our drug candidates qualify as breakthrough therapies, the FDA may later decide that such drug candidates no longer meet the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

We may seek fast track designation for some of our drug candidates. If a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the drug sponsor may apply for fast track designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular drug candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive fast track designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw fast track designation if it believes that the designation is no longer supported by data from our clinical development program. Fast track designation alone does not guarantee qualification for the FDA's priority review procedures.

The FDA, the EMA and other regulatory authorities may implement additional regulations or restrictions on the development and commercialization of our drug candidates, and such changes can be difficult to predict.

The FDA, the EMA and regulatory authorities in other countries have each expressed interest in further regulating small molecule pharmaceuticals. Agencies at both the federal and state level in the United States, as well as the U.S. Congressional committees and other governments or governing agencies, have also expressed interest in further regulating the small molecule pharmaceutical industry. Such action may delay or prevent commercialization of some or all of our drug candidates. Adverse developments in clinical trials of products conducted by others may cause the FDA or other oversight bodies to change the requirements for approval of any of our drug candidates. These regulatory review agencies and committees and the new requirements or guidelines they promulgate may lengthen the regulatory review process, require us to perform additional studies or trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our drug candidates or lead to significant post-approval limitations or restrictions. As we advance our drug candidates, we will be required to consult with these regulatory agencies and comply with applicable requirements and guidelines. If we fail to do so, we may be required to delay or discontinue development of such drug candidates. These additional processes may result in a review and approval process that is longer than we otherwise would have expected. Delays as a result of an increased or lengthier regulatory approval process or further restrictions on the development of our drug candidates can be costly and could negatively impact our ability to complete clinical trials and commercialize our current and future drug candidates in a timely manner, if at all.

Healthcare legislative reform measures may have a material adverse effect on our business and results of operations.

The U.S. and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of our current or future drug candidates or any future drug candidates, restrict or regulate post-approval activities and affect our ability to profitably sell a product for which we obtain marketing approval. Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: i) changes to our manufacturing arrangements, ii) additions or modifications to product labeling, iii) the recall or discontinuation of our products or iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business. In the U.S., there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in March 2010, the Affordable Care Act, or the ACA, was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the U.S. pharmaceutical industry. The ACA, among other things, subjects biological products to potential competition by lower-cost biosimilars, addresses a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees and taxes on manufacturers of certain branded prescription drugs, and creates a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 70% (increased pursuant to the Bipartisan Budget Act of 2018, effective as of 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D. Since then, the ACA risk adjustment program payment parameters have been updated annually.

Members of the U.S. Congress have expressed intent to pass legislation or adopt executive orders to fundamentally change or repeal parts of the ACA. While Congress has not passed repeal legislation to date, the TCJA, repealed, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." On December 14, 2018, a federal district court in Texas ruled the individual mandate is a critical and inseverable feature of the ACA, and therefore, because it was repealed as part of the TCJA, the remaining provisions of the ACA are invalid as well, and on December 18, 2019, the Fifth Circuit U.S. Court of Appeals held that the individual mandate is unconstitutional, and remanded the case to the lower court to reconsider its earlier invalidation of the full ACA. The Supreme Court of the United States granted certiorari on March 2, 2020, and heard oral arguments on the case on November 10, 2020, and the case is expected to be decided sometime in 2021. Pending review, the ACA remains in effect, but it is unclear at this time what effect the latest ruling will have on the status of the ACA. Litigation and legislation over the ACA are likely to continue, with unpredictable and uncertain results. We will continue to evaluate the effect that the ACA and its possible repeal and replacement has on our business.

Further, on January 20, 2017, an Executive Order was signed directing federal agencies with authorities and responsibilities under the ACA to waive, defer, grant exemptions from, or delay the implementation of any provision of the ACA that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. On October 13, 2017, an Executive Order was signed terminating the cost-sharing subsidies that reimburse insurers under the ACA. The Trump administration has concluded that cost-sharing reduction, or CSR, payments to insurance companies required under the ACA have not received necessary appropriations from Congress and announced that it will discontinue these payments immediately until those appropriations are made. The loss of the CSR payments is expected to increase premiums on certain policies issued by qualified health plans under the ACA. Several state Attorneys General filed suit to stop the administration from terminating the subsidies, but their request for a restraining order was denied by a federal judge in California on October 25, 2017. The loss of the cost share reduction payments is expected to increase premiums on certain policies issued by qualified health plans under the ACA. Further, on June 14, 2018, the U.S. Court of Appeals for the Federal Circuit ruled that the federal government was not required to pay to third-party payors more than $12 billion in ACA risk corridor payments that they argued were owed to them. The effects of this gap in reimbursement on third-party payors, the viability of the ACA marketplace, providers, and potentially our business, are not yet known.

Moreover, on January 22, 2018, a continuing resolution on appropriations for fiscal year 2018 was approved that delayed the implementation of certain ACA-mandated fees, including the so called “Cadillac” tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices; however on December 20, 2019, the Further Consolidated Appropriations Act (H.R. 1865) was signed into law, which repeals the Cadillac tax, the health insurance provider tax, and the medical device excise tax. It is impossible to determine whether similar taxes could be instituted in the future. The Bipartisan Budget Act of 2018, also amended the ACA, effective January 1, 2019, by increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and closing the coverage gap in most Medicare drug plans, commonly referred to as the “donut hole.” CMS published a final rule permitting further collections and payments to and from certain ACA qualified health plans and health insurance issuers under the ACA risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. In addition, CMS has recently published a final rule that would give states greater flexibility, starting in 2020, in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the ACA for plans sold through such marketplaces. Other legislative changes have been proposed and adopted in the U.S. since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation’s automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers up to 2% per fiscal year, and, due to subsequent legislative amendments, will remain in effect through 2029 unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012 among other things, reduced Medicare payments to several providers, including hospitals, imaging centers and treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There has been increasing legislative and enforcement interest in the U.S. with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the federal level, the Trump administration’s budget for fiscal years 2019 and 2020 contain further drug price control measures that could be enacted during the budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low income patients. Additionally, the Trump administration released a “Blueprint” to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug candidates paid by consumers. The U.S. Department of Health and Human Services, or HHS, has already started the process of soliciting feedback on some of these measures and, at the same time, is immediately implementing others under its existing authority. For example, in May 2019, CMS issued a final rule to allow Medicare Advantage Plans the option of using step therapy, a type of prior authorization, for Part B drugs beginning

January 1, 2020. This final rule codified CMS's policy change that was effective January 1, 2019. In addition, in September 2020, an Executive Order was issued directing the Secretary of Health and Human Services to pursue implementation of two new payment models under which Medicare would test whether paying no more than the "most-favored-nation" price for certain included drugs and biological products covered under Part B and Part D, respectively, would mitigate poor clinical outcomes and increased Medicare expenditures associated with high drug costs. If implemented, the "most-favored-nation" price would generally reflect the lowest price, after certain adjustments, for a pharmaceutical product sold in an economically comparable member country of the Organization for Economic Co-operation and Development. Congress has also continued to conduct inquiries into the prescription drug industry's pricing practices. While several proposed reform measures will require Congress to pass legislation to become effective, Congress has indicated that it will continue to seek new legislative and/or regulatory measures to address prescription drug costs. At the state level, legislatures are increasingly passing legislation and states are implementing regulations designed to control spending on, and patient out-of-pocket costs for, drug products. Implementation of cost containment measures or other healthcare reforms that affect the pricing and/or availability of drug products may impact our ability to generate revenue, attain or maintain profitability, or commercialize products for which we may receive regulatory approval in the future.

Further, on May 30, 2018, the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug candidates that have completed a Phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a pharmaceutical manufacturer to make its drug candidates available to eligible patients as a result of the Right to Try Act.

At the state level, individual states are increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional health care authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other health care programs. These measures could reduce the ultimate demand for our products, once approved, or put pressure on our product pricing.

We expect that additional state and federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for our current or future drug candidates or additional pricing pressures.

Our revenue prospects could be affected by changes in healthcare spending and policy in the U.S. and abroad.

We operate in a highly regulated industry and new laws, regulations or judicial decisions, or new interpretations of existing laws, regulations or decisions, related to healthcare availability, the method of delivery or payment for healthcare products and services could negatively impact our business, operations and financial condition.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal, and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future, including repeal, replacement, or significant revisions to the ACA. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for our current or future drug candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to obtain coverage and reimbursement approval for a product;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our results of operations and future profitability.

Our relationships with healthcare providers, other customers, and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, exclusion from government healthcare programs, contractual damages, reputational harm and diminished profits and future earnings.

Although we do not currently have any products on the market, once we begin commercializing our drug candidates, we will be subject to additional healthcare statutory and regulatory requirements and enforcement by the federal government and the states and foreign governments in which we conduct our business. Healthcare providers, physicians and third-party payors play a primary role in the recommendation and prescription of any drug candidates for which we obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our drug candidates for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations include the following:

- the federal Anti-Kickback Statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the federal civil and criminal false claims and civil monetary penalties laws, including the federal False Claims Act, or FCA, imposes criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false of fraudulent claim for purposes of the False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services; similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the federal physician payment transparency provisions, sometimes referred to as the “Sunshine Act” under the Affordable Care Act, require manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children’s Health Insurance Program to report to the Department of Health and Human Services information related to transfers of value made to licensed physicians (currently defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests of such physicians and their immediate family members. Effective January 1, 2022, these reporting obligations will extend to include transfers of value made to certain non-physician providers such as physician assistants and nurse practitioners;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 and its implementing regulations, imposes obligations on certain covered entity healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information; and
- analogous state laws and regulations, such as state anti-kickback and false claims laws may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers. Some state laws require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures. Further, many state laws governing the privacy and security of health information in certain circumstances, differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Efforts to ensure that our future business arrangements with third parties comply with applicable healthcare laws and regulations could involve substantial costs and may require us to undertake or implement additional policies or measures. We may face claims and proceedings by private parties, and claims, investigations and other proceedings by governmental authorities, relating to allegations that our business practices do not comply with current or future statutes, regulations or case law involving applicable fraud and abuse, privacy or data protection, or other healthcare laws and regulations, and it is possible that courts or governmental authorities may conclude that we have not complied with them, or that we may find it necessary or appropriate to settle any such claims or other proceedings. In connection with any such claims, proceedings, or settlements, we may be subject to significant civil, criminal and administrative penalties, damages, fines, other damages, imprisonment, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business is found not to be in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Compliance with global privacy and data security requirements could result in additional costs and liabilities to us or inhibit our ability to collect and process data globally, and the failure to comply with such requirements could subject us to significant fines and penalties, which may have a material adverse effect on our business, financial condition, or results of operations.

The regulatory framework for the collection, use, safeguarding, sharing, transfer, and other processing of information worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Globally, virtually every jurisdiction in which we operate has established its own data security and privacy frameworks with which we must comply. For example, the collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the European Union, including personal health data and employee data, is subject to the European Union General Data Protection Regulation, or the GDPR, which took effect across all member states of the European Economic Area, or EEA, in May 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR informs our obligations with respect to any clinical trials conducted in the EEA by expanding the definition of personal data to include coded data and requiring changes to informed consent practices and more detailed notices for clinical trial subjects and investigators. In addition, the GDPR imposes strict rules on the transfer of personal data to countries outside the European Union, including the United States and, as a result, increases the scrutiny that such rules should apply to transfers of personal data from any clinical trial sites located in the EEA to the United States. The GDPR also permits data protection authorities to require destruction of improperly gathered or used personal information and/or impose substantial fines for violations of the GDPR, which can be up to four percent of global revenues or 20 million Euros, whichever is greater, and confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR provides that European Union member states may make their own further laws and regulations limiting the processing of personal data, including genetic, biometric, or health data.

Given the breadth and depth of its obligations, complying with the GDPR’s requirements is rigorous and time intensive and requires significant resources and assessment of our technologies, systems and practices, as well as those of any third-party collaborators, service providers, contractors, or consultants that process or transfer personal data collected in the European Union.

Further, the United Kingdom exited the EU effective January 31, 2020, subject to a transition period that ended December 31, 2020. Brexit and ongoing developments in the United Kingdom have created uncertainty with regard to the regulation of data protection in the United Kingdom and could result in the application of new data privacy and protection laws and standards to our operations in the United Kingdom and our handling of personal data of individuals located in the United Kingdom. The United Kingdom has implemented legislation that substantially implements the GDPR, and the European Commission and the United Kingdom government announced a EU-UK Trade and Cooperation Agreement on December 24, 2020, providing for a temporary free flow of personal data between the EU and the United Kingdom, but it remains to be seen how the United Kingdom’s withdrawal from the EU will impact the manner in which United Kingdom data protection laws or regulations will develop and how data

transfers to and from the United Kingdom will be regulated and enforced by the UK Information Commissioner's Office, EU data protection authorities, or other regulatory bodies in the longer term.

In the United States, a broad variety of laws and regulations relating to privacy and data security may be applicable to our activities. New laws also are being considered at both the state and federal levels, and state legislatures such as California have already passed and enacted privacy legislation. For example, the California Consumer Privacy Act, or CCPA, which became effective on January 1, 2020, creates individual privacy rights for California consumers and increases the privacy and security obligations of entities handling certain personal data. The CCPA, among other things, requires covered companies to provide new disclosures to California consumers, and afford such consumers new abilities to opt out of certain sales of personal information, access and require deletion of their personal information, and receive detailed information about how their personal information is used. The CCPA has been amended on multiple occasions and additional regulations of the California Attorney General came into effect on August 14, 2020. However, aspects of the CCPA and its interpretation remain unclear. The effects of the CCPA are significant and may require us to modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply. Failure to comply with the CCPA may result in attorney general enforcement action and damage to our reputation. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. Moreover, a ballot initiative from privacy rights advocates intended to augment and expand the CCPA called the California Privacy Rights Act, or CPRA, was approved by California voters in the November 2020 election. The CPRA imposes additional obligations relating to consumer data on companies doing business in California beginning January 1, 2022, with implementing regulations expected on or before July 1, 2022, and enforcement beginning July 1, 2023. The CPRA significantly modifies the CCPA, including by expanding consumers' rights with respect to certain sensitive personal information, potentially resulting in further uncertainty and requiring us to incur additional costs and expenses in an effort to comply, as we may need to modify or augment our existing practices. The CPRA also creates a new state agency that will be vested with authority to implement and enforce the CCPA and the CPRA. New legislation proposed or enacted in a number of states impose, or have the potential to impose additional obligations on companies that collect, store, use, retain, disclose, transfer and otherwise process confidential, sensitive and personal information, and will continue to shape the data privacy environment nationally. State laws are changing rapidly and there is discussion in Congress of a new federal data protection and privacy law to which we would become subject if it is enacted. In addition, all 50 states have laws including obligations to provide notification of security breaches of computer databases that contain personal information to affected individuals, state officers and others.

The myriad international and U.S. privacy and data breach laws are not consistent, and compliance in the event of a widespread data breach is difficult and may be costly. Moreover, states have been frequently amending existing laws, requiring attention to changing regulatory requirements. In addition to government regulation, privacy advocates and industry groups have and may in the future propose self-regulatory standards from time to time. These and other industry standards may legally or contractually apply to us, or we may elect to comply with such standards. We expect that there will continue to be new proposed laws and regulations concerning data privacy and security, and we cannot yet determine the impact such future laws, regulations and standards may have on our business. With the GDPR, CCPA, CPRA, and other laws, regulations and other obligations relating to privacy and data protection imposing new and relatively burdensome obligations, and with substantial uncertainty over the interpretation and application of these and other obligations, we may face challenges in addressing their requirements, putting in place additional compliance mechanisms and making necessary changes to our policies and practices, and may incur significant costs and expenses in an effort to do so.

We make public statements about our use and disclosure of personal information through our privacy policy, information provided on our website and press statements. Although we endeavor to comply with our public statements and documentation, we may at times fail to do so or be alleged to have failed to do so. We may be subject to potential government or legal action if such policies or statements are found to be deceptive, unfair or misrepresentative of our actual practices. In addition, from time to time, concerns may be expressed about whether our technology compromises the privacy of our customers and others. While we believe that we comply with industry standards and applicable laws and industry codes of conduct relating to privacy and data protection in all material respects, there is no assurance that we will not be subject to claims that we have violated applicable laws or codes of conduct, that we will be able to successfully defend against such claims or that we will not be subject to significant fines and penalties in the event of non-compliance. Additionally, to the extent multiple state-level laws are introduced with inconsistent or conflicting standards and there is no federal law to preempt such laws, compliance with such laws could be difficult to achieve and we could be subject to fines and penalties in the event of non-

compliance. Furthermore, enforcement actions and investigations by regulatory authorities related to data security incidents and privacy violations continue to increase.

In addition, if third parties we work with, such as vendors or service providers, violate applicable laws or regulations or our policies, such violations may also put our data at risk and could in turn have an adverse effect on our business. Any failure or perceived failure by us or our service providers to comply with our applicable policies or notices relating to privacy or data protection, our contractual or other obligations to third parties, or any of our other legal obligations relating to privacy or data protection, may result in governmental investigations or enforcement actions, litigation, claims and other proceedings, and could result in significant fines, penalties, and other liability. Additionally, defending against any claims, litigation, regulatory proceedings, or other proceedings can be costly, time-consuming and may require significant financial and personnel resources. Therefore, even if we are successful in defending against any such actions or proceedings that may be brought against us, our business may be impaired, and we may suffer reputational and other harm.

Our employees, independent contractors, consultants, and vendors may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading laws, which could cause significant liability for us and harm our reputation.

We are exposed to the risk of fraud or other misconduct by our employees, independent contractors, KOLs, CROs, consultants, and vendors. Misconduct by these parties could include intentional, reckless and/or negligent conduct that causes us to fail to comply with FDA regulations or similar regulations of comparable foreign regulatory authorities, provide accurate information to the FDA or comparable foreign regulatory authorities, comply with manufacturing standards, comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities, report financial information or data accurately, or disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. This could include violations of HIPAA, other U.S. federal and state law, and requirements of non-U.S. jurisdictions, including the European Union Data Protection Directive. We are also exposed to risks in connection with any insider trading violations by employees or others affiliated with us, including inadvertent violations such as a sale of pledged shares by a lender when the pledgor is in possession of material nonpublic information. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards, regulations, guidance, or codes of conduct. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred and our employees may, from time to time, bring lawsuits against us for employment issues, including injury, discrimination, wage and hour disputes, sexual harassment, hostile work environment, or other employment issues. 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, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Risks Relating to Employee Matters and Managing Growth

Our future success depends on our ability to retain key executives and experienced scientists and to attract, retain and motivate qualified personnel.

We are highly dependent on the research and development, clinical and business development expertise of Christopher Gibson, our Chief Executive Officer, Tina Marriott Larson, our Chief Operating Officer and President, Michael Secora, our Chief Financial Officer, Shafique Virani, our Chief Corporate Development Officer, and Ramona Doyle, our Chief Medical Officer, as well as the other principal members of our management, scientific, technological and clinical team. Although we have entered into employment letter agreements with our executive officers, each of them may terminate their employment with us at any time or not be able to perform the services we need in the future. We do not maintain “key person” insurance for any of our executives or other employees. In addition, we rely on our employees to help operate and repair our robots and consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments

under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. The loss of the services of our executive officers or other key employees, including temporary loss due to illness, could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of, and commercialize products. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. Failure to succeed in clinical trials may make it more challenging to recruit and retain qualified scientific personnel.

Our presence in Salt Lake City, where we are headquartered, may limit our ability to hire talent. Some of the employees we may want to hire in the future will reside in the greater San Francisco, New York, San Diego or Boston metro areas and may not want to relocate to Salt Lake City. Many of the other pharmaceutical companies that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what we have to offer. If we are unable to continue to attract and retain high-quality personnel, the rate and success with which we can discover and develop drug candidates and our business will be limited.

We expect to expand our development and regulatory capabilities and potentially implement sales, marketing, and distribution capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

As of March 31, 2021, we had 218 full-time employees. We expect to experience significant growth in the number of our employees and the scope of our operations, particularly as we function as a public company and in the areas of product development, regulatory affairs and, if any of our drug candidates receives marketing approval, sales, marketing and distribution. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational, and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

We may acquire additional businesses or products, form strategic alliances, or create joint ventures with third parties that we believe will complement or augment our existing business. If we acquire businesses with promising markets or technologies, we may not be able to realize the benefit of acquiring such businesses if we are unable to successfully integrate them with our existing operations and company culture. We may encounter numerous difficulties in developing, manufacturing, and marketing any new products resulting from a strategic alliance or acquisition that delay or prevent us from realizing their expected benefits or enhancing our business. We cannot assure you that, following any such acquisition, we will achieve the expected synergies to justify the transaction.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any drug candidates that we may develop.

We face an inherent risk of product liability exposure related to the testing of drug candidates in human clinical trials and will face an even greater risk if we commercially sell any medicines that we may develop. If we cannot successfully defend ourselves against claims that our drug candidates or medicines caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any drug candidates or therapeutics that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;

- substantial monetary awards to trial participants or patients;
- loss of revenue; and
- the inability to commercialize our drug candidates.

Although we maintain product liability insurance, including coverage for clinical trials that we sponsor, it may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage as we commence additional clinical trials and if we successfully commercialize any drug candidates. The market for insurance coverage is increasingly expensive, and the costs of insurance coverage will increase as our clinical programs increase in size. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Risks Related to the Securities Markets and Ownership of Our Class A Common Stock

The dual-class structure of our common stock affects the concentration of voting power, which limits our Class A common stockholders' ability to influence the outcome of matters submitted to our stockholders for approval, including the election of our board of directors, the adoption of amendments to our certificate of incorporation and bylaws, and the approval of any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction.

Our Class A common stock offered in our initial public offering has one vote per share, and our Class B common stock has 10 votes per share. Based on 168,320,745 shares of our Class A common stock and 9,467,883 shares of our Class B common stock outstanding as of April 30, 2021. Dr. Gibson and his affiliate hold all of the issued and outstanding shares of our Class B common stock and approximately 37.3% of the voting power of our outstanding capital stock, which voting power may increase over time as Dr. Gibson exercises or vests in equity awards outstanding as of April 30, 2021. If all such equity awards held by Dr. Gibson had been exercised or vested and exchanged for shares of Class B common stock as of April 30, 2021, Dr. Gibson and his affiliate would hold 40.8% of the voting power of our outstanding capital stock. As a result, Dr. Gibson will be able to significantly influence any action requiring the approval of our stockholders, including the election of our board of directors, the adoption of amendments to our certificate of incorporation and bylaws, and the approval of any merger, consolidation, sale of all or substantially all of our assets, or other major corporate transaction. Dr. Gibson may have interests that differ from our Class A common stockholders and may vote in a way with which our Class A stockholders disagree with and which may be adverse to our Class A stockholders' interests. The concentrated control may have the effect of delaying, preventing, or deterring a change in control of our company, could deprive our stockholders of an opportunity to receive a premium for their capital stock as part of a sale in our company, and, thus, may affect the market price of our Class A common stock.

Future transfers by the holders of Class B common stock will generally result in those shares automatically converting into shares of Class A common stock, subject to limited exceptions, such as certain transfers for estate planning. Transfers or exchanges of shares of Class B common stock may result in the issuance of additional shares of Class A common stock and such issuances will be dilutive to holders of our Class A common stock. In addition, each share of Class B common stock will convert automatically into one share of Class A common stock upon the earliest of (i) April 16, 2028, (ii) the date specified by written consent or agreement of the holders of 662⁄3% of our then outstanding shares of Class B common Stock, (iii) nine months after Dr. Gibson ceases to hold any positions as an officer or director of the Company, or (iv) nine months after the death or disability of Dr. Gibson. We refer to the date on which such final conversion of all outstanding shares of Class B common stock pursuant to the terms of amended and restated certificate of incorporation occurs as the Final Conversion Date.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

As of April 30, 2021, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates beneficially owned approximately 61.6% of our voting power. These stockholders, acting together, may be able to impact matters requiring stockholder approval. For example, they may be able to impact 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 investors may feel are in their best interest as one of our stockholders. The interests of this group of stockholders may not always coincide with each investor's interests or the interests of other stockholders and they may act in a manner that advances their best interests and not necessarily those of other stockholders, including

seeking a premium value for their common stock, and might affect the prevailing market price for our common stock.

We are an "emerging growth company" as defined in the JOBS Act and will be able to avail ourselves of reduced disclosure requirements applicable to emerging growth companies, which could make our Class A common stock less attractive to investors and adversely affect the market price of our Class A common stock.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. We will remain an emerging growth company until the earlier of i) the last day of the fiscal year in which we have total annual gross revenues of $1.07 billion or more; ii) the last day of the fiscal year following the fifth anniversary of the date of the completion of our initial public offering; iii) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years; or iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission, which means the market value of our Class A common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- providing only two years of audited financial statements in addition to any required unaudited interim financial statements and a correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. In this Quarterly Report, we have not included all of the executive compensation-related information that would be required if we were not an emerging growth company.

We may choose to take advantage of some, but not all, of the available exemptions. We have taken advantage of reduced reporting burdens in this Quarterly Report. In particular, we have provided only two years of audited financial statements and have not included all of the executive compensation information that would be required if we were not an emerging growth company. We cannot predict whether our Class A common stockholders will find it less attractive if we rely on these exemptions. If some of our Class A common stockholders find it less attractive, as a result, there may be a less active trading market for our Class A common stock and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period for new or revised accounting standards during the period in which we remain an emerging growth company; however, we may adopt certain new or revised accounting standards early.

Although we are still evaluating the JOBS Act, we currently intend to take advantage of some, but not all, of the reduced regulatory and reporting requirements that will be available to us so long as we qualify as an "emerging growth company." We have elected to avail ourselves of this exemption and, therefore, we are not subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result, changes in rules of U.S. generally accepted accounting principles or their interpretation, the adoption of new guidance or the application of existing guidance to changes in our business could significantly affect our financial position and results of operations. In addition, our independent registered public accounting firm will not be required to provide an attestation report on the effectiveness of our internal control over financial reporting so long as we qualify as an "emerging growth company," which may increase the risk that material weaknesses or significant deficiencies in our internal control over financial reporting go undetected. Likewise, so long as we qualify as an "emerging growth company," we may elect not to provide you with certain information, including certain

financial information and certain information regarding compensation of our executive officers, that we would otherwise have been required to provide in filings we make with the SEC, which may make it more difficult for investors and securities analysts to evaluate our company. We cannot predict if our Class A common stockholders will find it less attractive because we may rely on these exemptions. If our Class A common stockholders find it less attractive, as a result, there may be a less active trading market for our Class A common stock, and our stock price may be more volatile and may decline.

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

Our stock price is likely to be volatile. The stock market in general and the market for biotechnology 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, holders of our Class A common stock may not be able to sell their Class A common stock at or above the price they originally paid for it. The market price for our Class A common stock may be influenced by many factors, including:

- the success of competitive products or technologies;
- results of clinical trials of our drug 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 any of our drug candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional drug candidates or products;
- 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; and
- the other factors described in this “Risk Factors” section.

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

The market price of our Class A common stock could decline at any time as a result of sales of a large number of shares of our Class A common stock in the market. These sales, or the perception that these sales could occur, may also depress the market price of our Class A common stock.

As of April 30, 2021, we had 158,852,862 shares of our Class A common stock and 9,467,883 shares of our Class B common stock outstanding. Of these shares, the 27,878,787 shares of Class A common stock were sold in our initial public offering and may be resold in the public market immediately, unless such shares are purchased by our affiliates. The remaining 130,974,075 shares of Class A common stock, or 82.5% of our outstanding shares of Class A common stock, and all shares of our Class B common stock (and any shares of Class A common stock into which they are converted) are currently prohibited or otherwise restricted from being sold in the public market under securities laws, market standoff agreements entered into by our stockholders with us, or lock-up agreements entered into by our stockholders with the underwriters.

The lock-up agreements pertaining to our initial public offering are set to expire on October 13, 2021. The representatives of the underwriters in our initial public offering, however, may, in their sole discretion, permit our officers, directors and other stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements. After the lock-up agreements expire, based upon the number of shares of Class A common stock issued and issuable upon exchange of shares of Class B common stock, on an as-converted basis, outstanding as of April 30, 2021, up to an additional 140,441,958 shares of Class A common stock will be eligible for sale in the public market, 44.0% of which shares are held by directors, executive officers and other affiliates and will be subject to certain limitations of Rule 144 under the Securities Act of 1933, as amended, or the Securities Act. Approximately 926,250 shares of our Class B common stock that are beneficially owned by Christopher Gibson, Ph.D., our Chief Executive Officer and a member of our board of directors, are not subject to a lock-up agreement and have been pledged to secure his obligations under a line of credit with UBS Credit Corp., or

UBS. If he defaults on his repayment obligations under the line of credit, UBS or any designee of UBS may exercise its rights to sell shares pledged to cover the amount due thereunder. Any transfers or sales of such pledged shares may cause the price of our Class A common stock to decline.

As of April 30, 2021 42,531,759 shares of Class A common stock that are either subject to outstanding options and warrants or reserved for future issuance under our equity compensation plans will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements, and Rule 144 and Rule 701 under the Securities Act. If these additional shares of Class A common stock are sold, or if it is perceived that they will be sold, in the public market, the market price of our Class A common stock could decline.

As of March 31, 2021, the holders of approximately 135,870,793 shares of our Class A common stock issued and issuable upon conversion of Class B common stock will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to the lock-up agreements described above. 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 for our Class A common stock.

We have broad discretion in how we use the proceeds from our initial public offering and may not use these proceeds effectively, which could affect our results of operations and cause our stock price to decline.

We will have considerable discretion in the application of the net proceeds from our initial public offering. We intend to use the net proceeds from our initial public offering to fund our drug discovery platform, pursue strategic collaborations and advance our drug candidates through clinical development efforts. We also intend to use the proceeds from our initial public offering to expand our infrastructure and facilities to support our development efforts, to fund new and ongoing research activities and new drug candidates and for working capital and other general corporate purposes, which may include funding for the hiring of additional personnel, capital expenditures and the costs of operating as a public company. Investors will be relying upon management's judgment with only limited information about our specific intentions for the use of the balance of the net proceeds from our initial public offering. We may use the net proceeds from our initial public offering 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 the net proceeds from our initial public offering in a manner that does not produce income or that loses value.

Because we do not anticipate paying any cash dividends on our capital stock in the foreseeable future, capital appreciation, if any, will be your sole source of gain.

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any existing or future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our Class A common stock will be the Class A common stockholders' sole source of gain for the foreseeable future.

We have increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, and particularly after we are no longer an "emerging growth company," we will incur significant legal, accounting, and other expenses that we did not incur as a private company. In addition, the Sarbanes-Oxley Act of 2002 and rules subsequently implemented by the Securities and Exchange Commission and the Nasdaq Stock Market have imposed various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance.

Pursuant to Section 404, we will be required to furnish a report by our management on our internal control over financial reporting, including an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will 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 dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that neither we nor our independent registered public accounting firm will be able to conclude within the prescribed timeframe that our internal control over financial reporting is effective as required by Section 404. This could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements. In addition, if we are not able to continue to meet these requirements, we may not be able to remain listed on the Nasdaq Stock Market.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law might discourage, delay, or prevent a change in control of our company or changes in our management and, therefore, depress the market prices of our Class A common stock.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could depress the market prices of our Class A common stock by acting to discourage, delay or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions, among other things:

- establish a classified board of directors so that not all members of our board are elected at one time;
- permit only the board of directors to establish the number of directors and fill vacancies on the board;
- authorize the issuance of "blank check" preferred stock that our board could use to implement a stockholder rights plan (also known as a "poison pill");
- eliminate the ability of our stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders;
- prohibit cumulative voting;
- authorize our board of directors to amend the bylaws;
- establish advance notice requirements for nominations for election to our board or for proposing matters that can be acted upon by stockholders at annual stockholder meetings; and
- require a super-majority vote of stockholders to amend some provisions described above.

In addition, Section 203 of the General Corporation Law of the State of Delaware, or DGCL, prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.
Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or preventing a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our Class A common stock.

Our amended and restated bylaws in effect provide that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated bylaws filed in connection with our initial public offering provide that the Court of Chancery of the State of Delaware or, if the Court of Chancery does not have jurisdiction, another State court in Delaware or the federal district court for the District of Delaware, is the exclusive forum for the following, except for any claim as to which such court determines that there is an indispensable party not subject to the jurisdiction of such court, and the indispensable party does not consent to the personal jurisdiction of such court within 10 days following such determination, which is vested in the exclusive jurisdiction of a court or forum other than such court or for which such court does not have subject matter jurisdiction:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of fiduciary duty;

- any action asserting a claim against us arising under the DGCL, our amended- and restated certificate of incorporation or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction. Our amended and restated bylaws further provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, and may result in increased costs to stockholders of bringing a claim, each of which may discourage lawsuits against us and our directors, officers and other employees. Any person or entity purchasing or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and consented to these provisions. There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. It is possible that a court could find these types of provisions to be inapplicable or unenforceable, and if a court were to find either exclusive-forum provision in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business.

We may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our Class A common stock may be volatile. The stock market in general, and the Nasdaq Stock Market and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

Our actual operating results may differ significantly from any guidance that we provide.

From time to time, we may provide guidance in our quarterly earnings conference calls, quarterly earnings releases, or otherwise, regarding our future performance that represents our management's estimates as of the date of release. This guidance, which would include forward-looking statements, would be based on projections prepared by our management. Neither our registered public accountants nor any other independent expert or outside party would compile or examine the projections. Accordingly, no such person would express any opinion or any other form of assurance with respect to the projections.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. The principal reason that we would release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such third parties.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying any guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance would be only an estimate of what management believes is realizable as of the date of release. Actual results may vary from our guidance and the variations may be material.

As a a public company, we are obligated to develop and maintain proper and effective internal controls over financial reporting. Any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our Class A common stock.

Our chief financial officer has only been the chief financial officer of a publicly traded company since our initial public offering and our chief executive officer has only been the chief executive officer of a publicly traded company since our initial public offering. Neither has been involved in the long term operations of a public company. Pursuant to

Section 404 of the Sarbanes-Oxley Act, we will be required to furnish a report by our management on our internal control over financial reporting beginning with our second filing of an Annual Report on Form 10-K with the SEC. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. However, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting until our first annual report required to be filed with the SEC following the date we are no longer an emerging growth company. At such time as we are required to obtain auditor attestation, if we then have a material weakness, we would receive an adverse opinion regarding our internal control over financial reporting from our independent registered accounting firm.

To achieve compliance with Section 404 within the prescribed period, we will 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 dedicate internal resources, including through hiring additional financial and accounting personnel, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented, and implement a continuous reporting and improvement process for internal control over financial reporting. During our evaluation of our internal control, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, or results of operations. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of shares of our Class A common stock could decline, and we could be subject to sanctions or investigations by the Nasdaq Stock Market, the SEC, or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

General Risks

Unfavorable global economic conditions 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. For example, in 2008, the global financial crisis caused extreme volatility and disruptions in the capital and credit markets and the current COVID-19 pandemic has caused significant volatility and uncertainty in U.S. and international markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including weakened demand for our drug candidates and impaired ability to raise additional capital when needed on acceptable terms, if at all. A weak or declining economy could also strain our suppliers or possibly result in supply disruption. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Current and future litigation against us, which may arise in the ordinary course of our business, could be costly and time consuming to defend.

We are periodically subject to claims that arise in the ordinary course of business, such as claims brought by our collaborators or suppliers in connection with commercial disputes, employment claims made by our current or former employees, or claims brought by third parties for failure to adequately protect their personal data. Third parties may in the future assert intellectual property rights to technologies that are important to our business and demand back royalties or demand that we license their technology. Litigation may result in substantial costs and may divert management’s attention and resources, which may seriously harm our business, overall financial condition and operating results. Insurance may not cover such claims, may not be sufficient for one or more of such claims and may not continue to be available on terms acceptable to us. A claim brought against us that is uninsured or underinsured could result in unanticipated costs and management distraction, negatively affecting our business, financial condition and results of operations.

If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.

The trading market for our Class A common stock relies, in part, on the research and reports that industry or financial analysts publish about us or our business. If only a small number of analysts maintain coverage of us, the trading price of our stock would likely decrease. If an analyst covering our stock downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.

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

(a) Sales of Unregistered Securities

Stock Option Exercises
For the three months ended March 31, 2021, we issued 1,722,027 shares of our common stock to our employees, directors, advisors and consultants upon the exercise of stock options outstanding under our 2016 Equity Incentive and Key Personnel Incentive Stock Plans for aggregate consideration of $2.2 million. The shares of common stock issued upon the exercise of stock options were issued pursuant to written compensatory plans or arrangements with our employees, directors, advisors, and consultants, in reliance on the exemption provided by Rule 701 promulgated under the Securities Act, or pursuant to Section 4(a)(2) under the Securities Act, relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required. All recipients either received adequate information about our company or had access, through employment or other relationships, to such information.

Stock Option Grants
For the three months ended March 31, 2021, we issued to employees, directors, advisors and consultants, options to purchase an aggregate of 1,849,311 shares of our Class A common stock at a weighted-average exercise price of $4.44 per share in reliance on the exemption provided by Rule 701 promulgated under the Securities Act, or pursuant to Section 4(a)(2) under the Securities Act, relative to transactions by an issuer not involving any public offering, to the extent an exemption from such registration was required.

(b) Use of Proceeds from Public Offering of Class A Common Stock

On April 15, 2021, the Registration Statements on Form S-1 (File No. 333-254576) for our initial public offering of our Class A common stock was declared effective by the SEC. Shares of our Class A common stock began trading on the Nasdaq Global Market on April 16, 2021. The offering closed on April 20, 2021.

The underwriters of our initial public offering were Goldman Sachs & Co. LLC, J.P. Morgan, BofA Securities, SVB Leerink, Allen & Company LLC and KeyBanc Capital Markets.

We paid to the underwriters of our initial public offering an underwriting discount totaling approximately $35.1 million. In addition, we incurred expenses of approximately $4.1 million which, when added to the underwriting discount, amount to total expenses of approximately $39.2 million. Thus, the net offering proceeds, after deducting underwriting discounts and offering expenses, were approximately $462.6 million. No offering expenses were paid directly or indirectly to any of our directors or officers (or their associates) or persons owning 10.0% or more of any class of our equity securities or to any other affiliates.

We are holding a significant portion of the balance of the net proceeds in bank deposits held in checking accounts. There has been no material change in the planned use of proceeds from our IPO from those that were described in the final prospectus filed pursuant to Rule 424(b) under the Securities Act and other periodic reports previously filed with the SEC.

(c) Issuer Purchases of Equity Securities

None.

Item 6. Exhibits.

Exhibit Index:

Exhibit number	Description	Form	File No.	Exhibit No.	Filing Date	Filed / Furnished Herewith
3.1	Amended and Restated Certificate of Incorporation of Recursion Pharmaceuticals, Inc.	8-K	001-40323	3.1	April 21, 2021	
3.2	Amended and Restated Bylaws of Recursion Pharmaceuticals, Inc.	8-K	001-40323	3.2	April 21, 2021	
4.1	Amended and Restated Investors' Rights Agreement by and among the Registrant and certain of its stockholders, dated September 1, 2020.	S-1/A	333-254576	4.1	April 15, 2021	
4.2	Specimen Class A common stock certificate of the Registrant.	S-1/A	333-254576	4.2	April 15, 2021	
10.1+	Exchange Agreement dated April 20, 2021 among the Registrant, Christopher Gibson, Ph.D., and the Gibson Family Trust.					X
10.2+	Equity Exchange Right Agreement dated April 20, 2021 among the Registrant, Christopher Gibson, Ph.D., and the Gibson Family Trust.					X
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	XBRL Instance Document					X
101.SCH	XBRL Taxonomy Extension Schema Document					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					X

* The certifications furnished in Exhibit 32.1 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. Such certifications will not be deemed to be incorporated by reference into any filings under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.

\+ Indicated management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned thereunto duly authorized on May 12, 2021.

RECURSION PHARMACEUTICALS, INC.

By: /s/ Christopher Gibson
Christopher Gibson
Chief Executive Officer
(Principal Executive Officer)

By: /s/ Michael Secora
Michael Secora
Chief Financial Officer
(Principal Financial and Accounting Officer)

EXCHANGE AGREEMENT

THIS EXCHANGE AGREEMENT (this "**Agreement**") is made and entered into as of April 20, 2021, by and between Recursion Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), and stockholders of the Company listed on Exhibit A hereto (collectively, the "**Exchange Stockholders**").

WHEREAS, the Company's board of directors (the "**Board**") has determined that it is in the best interests of the Company and its stockholders to implement a dual class common stock structure in connection with the Company's initial public offering of its capital stock (the "**IPO**") to, among other things, enable the Company to execute its long-term vision;

WHEREAS, in connection with the IPO, the Board has approved an Amended and Restated Certificate of Incorporation of the Company (the "**Amended and Restated Certificate of Incorporation**"), which, among other things, if effected, would create two series within a class of common stock of the Company, denominated Class A Common Stock, par value $0.00001 per share ("**Class A Common Stock**"), entitling holders to one (1) vote for each share thereof held and Class B Common Stock, par value $0.00001 per share ("**Class B Common Stock**"), entitling holders to ten (10) votes for each share thereof held, unless otherwise required by applicable law;

WHEREAS, the Amended and Restated Certificate of Incorporation further provides that each share of the Company's common stock, par value $0.00001 per share (the "**Common Stock**") will, upon the effectiveness of the filing of the Amended and Restated Certificate of Incorporation (the **"Effective Time**"), be reclassified as, and will become, one share of Class A Common Stock;

WHEREAS, the Exchange Stockholders hold or will hold shares of Common Stock as of immediately prior to the Effective Time and all such shares of Common Stock will be reclassified as, and will become, an equal number of shares of Class A Common Stock at the Effective Time;

WHEREAS, the Board has determined that exchanging shares of Class A Common Stock that will be held by the Exchange Stockholders at the Effective Time as set forth on Exhibit A hereto for shares of Class B Common Stock as part of the implementation of the dual class common stock structure is advisable and in the best interest of the Company and all of its stockholders, including its stockholders other than the Exchange Stockholders; and

WHEREAS, the Parties intend that no gain or loss shall be recognized in the Exchange pursuant to Sections 368(a)(1)(E) and/or 1036 of the Internal Revenue Code of 1986, as amended (the "**Code**").

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual promises, representations and covenants set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and accepted, the parties hereto agree as follows:

ARTICLE I.
EXCHANGE AND ISSUANCE OF CLASS B COMMON STOCK

i. Exchange of Class A Common Stock.

(1) Subject to the terms and conditions of this Agreement, immediately following the Effective Time each Exchange Stockholder shall be deemed to have automatically transferred to the Company the shares of Class A Common Stock held by such Exchange Stockholder as set forth on Exhibit A hereto (the "**Class A Shares**") and the Company shall issue, and shall be deemed to issue, to

each Exchange Stockholder shares of Class B Common Stock (the "**Class B Shares**"), at an exchange ratio of one (1) Class A Share for one (1) Class B Share (the "**Exchange**"). The number of Class A Shares to be transferred and the number of Class B Shares to be received in the Exchange by each Exchange Stockholder are as set forth on Exhibit A hereto.

(2) Concurrently herewith, each Exchange Stockholder is delivering to the Company such instruments of transfer or other documentation as may be reasonably required to evidence that the shares of Common Stock (which will automatically be reclassified as, and will become, an equal number of shares of Class A Common Stock upon the Effective Time) have been duly transferred to the Company to be held in escrow until the Effective Time and such documents are automatically released without further action by the Company or the Exchange Stockholder at the Effective Time.

ii. Effective Time of the Exchange:

(1) The Exchange shall occur and be deemed effective without any further action by the Company or the Exchange Stockholders immediately following the Effective Time and prior to the consummation of the sale of the shares of the Company's capital stock in the IPO as part of the closing thereof.

(2) Upon the effectiveness of the Exchange, the Company shall deliver to each Exchange Stockholder such documentation as may be reasonably required to evidence that the Class B Shares have been duly issued and transferred to the applicable Exchange Stockholder.

ARTICLE II.
REPRESENTATIONS AND WARRANTIES OF THE EXCHANGE HOLDER

Each Exchange Stockholder hereby represents and warrants to the Company, with respect to the transactions contemplated hereby, as follows:

i. Ownership; Authority. Each Exchange Stockholder will be, effective as of the Effective Time, the beneficial and legal owner of the Class A Shares exchanged hereunder, free and clear of all liens, encumbrances and restrictions (except as disclosed in the registration statement on Form S-1 under the Securities Act of 1933, as amended (the "**Securities Act**"), in connection with the IPO, or for restrictions on transfer arising under applicable securities laws or as set forth or contemplated by this Agreement, the Amended and Restated Certificate of Incorporation or any other agreements to which such Exchange Stockholder and the Company are a party). Each Exchange Stockholder has the full right, power and authority to enter into this Agreement and, assuming the waiver or inapplicability of any and all rights of first refusal or co-sale by the Company and the Company's stockholders that are applicable to the transactions contemplated hereby, to transfer, convey and exchange the Class A Shares in accordance with this Agreement. Assuming the due authorization, execution and delivery by the Company, this Agreement constitutes a valid and binding agreement of such Exchange Stockholder, enforceable against such Exchange Stockholder in accordance with its terms (subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity). Upon consummation of the Exchange contemplated hereby, the Company will acquire from each Exchange Stockholder good and marketable title to the Class A Shares, free and clear of any and all liens, encumbrances and restrictions (except as disclosed in the registration statement on Form S-1 under the Securities Act, in connection with the IPO, or for restrictions on transfer arising under applicable securities laws or as set forth or contemplated by this Agreement, the Amended and Restated Certificate of Incorporation or any other agreements to which such Exchange Stockholder and

the Company are a party, and subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity).

ii.Governmental Authorization. The execution, delivery and performance by such Exchange Stockholder of this Agreement and the consummation of the transactions contemplated hereby require no action by or in respect of, or filing with, any governmental authority on the part of such Exchange Stockholder (excluding, for the avoidance of doubt (a) the filing by the Company of the Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware and (b) compliance by the Company with any applicable requirements of any applicable state or federal securities laws). For purposes of this Agreement, "**governmental authority**" means any transnational, domestic or foreign federal, state or local governmental, regulatory or administrative authority, department, court, agency or official, including any political subdivision thereof.

iii.Noncontravention. The execution, delivery and performance by such Exchange Stockholder of this Agreement and the consummation of the transactions contemplated hereby do not and will not (a) violate any governing document, including any trust agreement, applicable to such Exchange Stockholder, (b) subject to compliance with Section 2.2, violate any applicable law, (c) assuming the waiver or inapplicability of any and all rights of first refusal or co-sale held by the Company or the Company's stockholders that are applicable to the transactions contemplated hereby, require any consent or other action under, constitute a default under, or give rise to any right of termination, cancellation or acceleration of any obligation of such Exchange Stockholder or to the loss of any benefit to which such Exchange Stockholder is entitled under any provision of any agreement or other instrument binding upon such Exchange Stockholder, other than as disclosed in the registration statement on Form S-1 under the Securities Act, in connection with the IPO or (d) result in the creation or imposition of any lien on such Exchange Stockholder's Class B Shares, other than restrictions on transfer arising under applicable securities laws or as set forth or contemplated by this Agreement, the Amended and Restated Certificate of Incorporation or any other agreements to which such Exchange Stockholder and the Company are a party.

iv.Restricted Securities; Rule 144. Such Exchange Stockholder understands that the Class B Shares are characterized as "restricted securities" under the Securities Act because such shares are being acquired from the Company in a transaction not involving a public offering and in exchange for shares acquired from the Company in a transaction not involving a public offering, and that under the Securities Act and the rules and regulations promulgated thereunder the Class B Shares may be resold without registration under the Securities Act only in certain limited circumstances, and subject to the restrictions under the Company's certificate of incorporation. Such Exchange Stockholder understands and hereby acknowledges that the Class B Shares must be held indefinitely unless subsequently registered under the Securities Act or an exemption from such registration is otherwise available. Such Exchange Stockholder is aware of the provisions of Rule 144 promulgated under the Securities Act, which permit limited resales of shares purchased in a transaction not involving a public offering, subject to the satisfaction of certain conditions.

v.Legends. It is understood that any certificate or book entry position representing the Class B Shares and any securities issued in respect thereof or exchange therefor, shall bear legends in substantially the following form (in addition to any legend required under applicable state securities laws or agreements to which the Exchange Stockholder is a party):

"THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**ACT**"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS PURSUANT TO REGISTRATION OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS."

ARTICLE III.
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

The Company hereby represents and warrants to each Exchange Stockholder, with respect to the transactions contemplated hereby, as follows:

i. Corporate Existence and Power. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware.

ii. Corporate Authorization. (a) The execution, delivery and performance by the Company of this Agreement and the consummation of the transactions contemplated hereby, including the issuance and delivery of the Class B Shares (including the conversion thereof into Class A Common Stock upon the terms specified in the Amended and Restated Certificate of Incorporation and the reclassification of Common Stock into Class A Common Stock at the Effective Time) in accordance with the Amended and Restated Certificate of Incorporation, are within the corporate powers of the Company and have been duly authorized by all necessary corporate action on the part of the Company and the Company's stockholders, subject to compliance with Section 3.3 and the approval of and adoption by the Company's stockholders of the Amended and Restated Certificate of Incorporation. Any and all rights of first refusal or co-sale held by the Company or the Company's stockholders that are applicable to the transactions contemplated hereby have been waived or are otherwise inapplicable. Assuming the due authorization, execution and delivery by each Exchange Stockholder, this Agreement constitutes a valid and binding agreement of the Company, enforceable against the Company in accordance with its terms (subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity).

iii. Governmental Authorization. The execution, delivery and performance by the Company of this Agreement and the consummation of the transactions contemplated hereby require no action by or in respect of, or filing with, any governmental authority other than (a) the filing by the Company of the Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware and (b) compliance by the Company with any applicable requirements of any applicable state or federal securities laws.

iv. Noncontravention. The execution, delivery and performance by the Company of this Agreement and the consummation of the transactions contemplated hereby do not and will not, assuming compliance with the matters referred to in Section 3.3 and approval of and adoption by the Company's stockholders of the Amended and Restated Certificate of Incorporation, (a) violate the certificate of incorporation or bylaws of the Company, (b) violate any applicable law, (c) require any consent or other action by any

person under, constitute a default under, or give rise to any right of termination, cancellation or acceleration of any right or obligation of the Company or to the loss of any benefit to which the Company is entitled under any provision of any agreement or other instrument binding upon the Company or (d) result in the creation or imposition of any lien on the Class B Shares other than as set forth or contemplated by this Agreement or the Amended and Restated Certificate of Incorporation.

ARTICLE IV.
COVENANTS

i.Market Stand-Off Agreement. Each of the Exchange Stockholders has entered into a lock-up agreement with the underwriters of the IPO with respect to the sale, disposition or transfer of such Exchange Stockholder's securities of the Company and each of the Exchange Stockholders agrees not to revoke such lock-up agreement. Each of the Exchange Stockholders also agrees that any other lock-up or market stand-off agreements applicable to the shares of Common Stock of the Company held by such Exchange Stockholders continue to apply to the Class B Shares in accordance with the terms of such agreements.

ii.Waiver of Right of First Refusal. The Company hereby waives any preexisting rights of first refusal applicable to the transactions contemplated hereby.

ARTICLE V.
GENERAL PROVISIONS

i.Governing Law. This Agreement shall be governed in all respects by the internal laws of the State of Delaware as applied to agreements entered into among Delaware residents to be performed entirely within Delaware, without regard to principles of conflicts of law.

ii.Successors and Assigns. Except as otherwise provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

iii.Entire Agreement; Amendment. Other than the rights, restrictions and preferences provided for the Class B Common Stock pursuant to the Amended and Restated Certificate of Incorporation and bylaws, this Agreement, including the exhibits attached hereto, constitutes the full and entire understanding and agreement between the parties with respect to the subject matter hereof. Neither this Agreement nor any term hereof may be amended or, waived other than by a written instrument signed by the Exchange Stockholders and the Company.

iv.Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument.

v.Tax Consequences. The Parties intend that no gain or loss shall be recognized in the Exchange pursuant to Sections 368(a)(1)(E) and/or 1036 of the Code. The Parties adopt this Agreement as a plan of reorganization within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3(a). Notwithstanding the foregoing, each Exchange Stockholder has reviewed with his own tax advisors the federal, state, local and foreign tax consequences of the Exchange, investment in the Class B Shares and the transactions contemplated by this Agreement. Each Exchange Stockholder is relying solely on such advisors and not on any statements or representations of the Company or any of its agents in connection with the transactions contemplated hereby, except for the representations and warranties of the Company expressly set forth in Article III.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned have executed this Agreement to be effective as of the date first above written.

RECURSION PHARMACEUTICALS, INC.

By: */s/ Louisa Daniels*

Name: Louisa Daniels

Title: Chief Legal Officer

[Signature Page to Exchange Agreement]

IN WITNESS WHEREOF, the undersigned have executed this Agreement to be effective as of the date first above written.

CHRISTOPHER GIBSON

By: */s/ Christopher Gibson*

GIBSON FAMILY TRUST

By: */s/ Christopher Gibson*
Name: Christopher Gibson
Title: Trustee

[Signature Page to Exchange Agreement]

EXHIBIT A

Exchange Stockholder	**Number of Shares of Class B Common Stock to be Issued**	**Number of Shares of Class A Common Stock Exchanged**
Christopher Gibson	9,317,883	9,317,883
Gibson Family Trust	150,000	150,000
Total:	**9,467,883**	**9,467,883**

Exhibit 10.2

EQUITY EXCHANGE RIGHT AGREEMENT

THIS EQUITY EXCHANGE RIGHT AGREEMENT (this "**Agreement**") is made and entered into as of April 20, 2021, by and between Recursion Pharmaceuticals, Inc., a Delaware corporation (the "**Company**"), and Christopher Gibson (the "**Founder**").

WHEREAS, the Company's board of directors (the "**Board**") has determined that it is in the best interests of the Company and its stockholders to implement a dual class common stock structure in connection with the Company's initial public offering of its capital stock (the "**IPO**") to, among other things, enable the Company to execute its long-term vision;

WHEREAS, in connection with the IPO, the Board has approved an Amended and Restated Certificate of Incorporation of the Company (the "**Amended and Restated Certificate of Incorporation**"), which, among other things, if effected, would create two series within a class of common stock of the Company, denominated Class A Common Stock, par value $0.00001 per share ("**Class A Common Stock**"), entitling holders to one (1) vote for each share thereof held and Class B Common Stock, par value $0.00001 per share ("**Class B Common Stock**"), entitling holders to ten (10) votes for each share thereof held, unless otherwise required by applicable law;

WHEREAS, the Amended and Restated Certificate of Incorporation further provides that each share of the Company's common stock, par value $0.00001 per share (the "**Common Stock**") will, upon the effectiveness of the filing of the Amended and Restated Certificate of Incorporation (the "**Effective Time**"), be reclassified as, and will become, one share of Class A Common Stock;

WHEREAS, Founder holds an award of options to purchase Common Stock that will be outstanding as of immediately prior to the Effective Time as set forth in Exhibit A (the "**Founder Equity Award**") and the shares of Common Stock covered by the Founder Equity Award will be reclassified as, and will become, Class A Common Stock at the Effective Time, and the Founder Equity Award has been granted under the Company's 2016 Equity Incentive Plan, as amended, and the option agreement memorializing the Founder Equity Award (collectively, the "**Equity Documents**"); and

WHEREAS, as part of the implementation of the dual class common stock structure, the Board has determined that it is advisable and in the best interest of the Company and all of its stockholders, including its stockholders other than Founder, to provide Founder with the right to require the Company to exchange shares of Class A Common Stock that Founder acquires upon the exercise of his Founder Equity Award for a number of shares of Class B Common Stock of equivalent value as determined on the date of the exchange (which is expected to be on a one share-for-one share basis), subject to the terms and conditions set forth in this Agreement; and

WHEREAS, the parties intend that no gain or loss will be recognized in any Exchange (as defined below) pursuant to Sections 368(a)(1)(E) and/or 1036 of the Internal Revenue Code of 1986, as amended (the "**Code**").

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual promises, representations and covenants set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and accepted, the parties hereto agree as follows:

ARTICLE I.
PUT RIGHT AND EXCHANGE AND ISSUANCE OF CLASS B COMMON STOCK

i. Grant of Put Right. Effective immediately following the Effective Time, and subject to the terms and provisions of this Agreement (including Section 1.2(a) below), the Company hereby irrevocably grants to Founder the right (the "**Put Right**") to require the Company to exchange any shares of Class A Common Stock that Founder acquires following the Effective Time as a result of the exercise of his Founder Equity Award (each, a "**Put Eligible Share**") for a number of shares of Class B Common Stock of equivalent value as determined on the date of the exchange (which is expected to be on a one share-for-one share basis), subject to the terms and conditions set forth in this Agreement (the "**Exchange**").

ii. Exercise of Put Right.

(1) As a condition precedent to the exercise of the Put Right on any given date, the Company and Founder must mutually agree on the value-for-value exchange ratio and that no gain or loss will be required to be recognized for U.S. federal tax purposes on account of such exercise and related Exchange (the "**Put Right Condition**").

(2) If the Put Right Condition is satisfied, the Put Right will be exercisable by Founder by submitting a completed and fully-executed notice in the form attached hereto as Exhibit B (the "**Put Right Notice**") to the Company on or prior to the Put Right's Expiration Date (as defined in Section 1.5 below). If the Put Right Condition is satisfied, the Put Right will be deemed to have been exercised immediately prior to 5:00 p.m. Mountain Time on the date of timely delivery of a Put Right Notice with respect to the Put Right.

(3) Failure to satisfy the Put Right Condition or to deliver a Put Right Notice prior to 5:00 p.m. Mountain Time on a Put Right's Expiration Date will constitute an irrevocable waiver of the Put Right with respect to any shares of Class A Common Stock that remain subject to the Founder Equity Award and any remaining Put Eligible Shares.

(4) A Put Right cannot be exercised by Founder with respect to any Put Eligible Share more than once. Further, Founder will have no Put Right pursuant to this Agreement with respect to any share of Class A Common Stock that is acquired by Founder following the Effective Time other than as a result of the exercise of the Founder Equity Award.

iii. Exchange of Shares. Within ten (10) calendar days after the Company's receipt of a properly executed Put Right Notice, and provided the Put Right Condition remains satisfied, the Company will complete the Exchange for the specified number of Put Eligible Shares indicated in the Put Right Notice ("**Exercised Shares**") by issuing, out of authorized but unissued shares of Class B Common Stock legally available therefor, a number of shares of Class B Common Stock to Founder of equivalent value determined on the date of the Exchange (which is expected to be on a one share-for-one share basis). Upon the effectiveness of such Exchange, the Company will deliver to Founder such documentation as may be reasonably required to evidence that the shares of Class B Common Stock have been duly issued and transferred to the applicable Founder in exchange for the Exercised Shares.

iv. Rights to Shares of Class A Common Stock Following Exchange. Upon the Exchange, Founder will no longer have any rights as a holder of the Exercised Shares that are the subject of the Exchange (other than the right to receive the shares of Class B Common Stock in accordance with this Agreement). Such Exercised Shares will be deemed to have been redeemed by the Company in accordance with the applicable provisions hereof, whether or not the certificate(s) therefor have been delivered to Founder.

v.Termination of Put Right. The Put Right will terminate on the following date(s) (the "**Expiration Date**"):

(1) With respect to any shares of Class A Common Stock subject to the Founder Equity Award that have not become Put Eligible Shares, the Expiration Date will be the date such shares are forfeited pursuant to the applicable Equity Documents; and

(2) With respect to any Put Eligible Shares, the Expiration Date will be the earliest of the date on which:

(a) Founder sells, transfers, or otherwise disposes of such Put Eligible Shares; and

(b) the Final Conversion Date (as defined in the Amended and Restated Certificate of Incorporation).

ARTICLE II.
REPRESENTATIONS AND WARRANTIES OF THE FOUNDER

Founder hereby represents and warrants to the Company, with respect to the transactions contemplated hereby, as follows:

i.Ownership; Authority. Founder has the full right, power and authority to enter into this Agreement. Assuming the due authorization, execution and delivery by the Company, this Agreement constitutes a valid and binding agreement of Founder, enforceable against Founder in accordance with its terms (subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity). Upon consummation of an Exchange contemplated hereby, the Company will acquire from Founder good and marketable title to the Exercised Shares subject to such Exchange, free and clear of any and all liens, encumbrances and restrictions (except for restrictions on transfer arising under applicable securities laws or as set forth or contemplated by this Agreement, the Amended and Restated Certificate of Incorporation or any other agreements to which Founder and the Company are a party, and subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity).

ii.Governmental Authorization. The execution, delivery and performance by Founder of this Agreement and the consummation of the transactions contemplated hereby require no action by or in respect of, or filing with, any governmental authority on the part of Founder (excluding, for the avoidance of doubt (a) the filing by the Company of the Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware and (b) compliance by the Company with any applicable requirements of any applicable state or federal securities laws). For purposes of this Agreement, "**governmental authority**" means any transnational, domestic or foreign federal, state or local governmental, regulatory or administrative authority, department, court, agency or official, including any political subdivision thereof.

iii.Noncontravention. The execution, delivery and performance by Founder of this Agreement and the consummation of the transactions contemplated hereby do not and will not (a) violate any governing document, including any trust agreement, applicable to Founder, (b) subject to compliance with Section 2.2, violate any applicable law, (c) assuming the waiver or inapplicability of any and all rights of first refusal or co-sale held by the Company or the Company's stockholders that are applicable to the

transactions contemplated hereby, require any consent or other action under, constitute a default under, or give rise to any right of termination, cancellation or acceleration of any obligation of Founder or to the loss of any benefit to which Founder is entitled under any provision of any agreement or other instrument binding upon Founder or (d) result in the creation or imposition of any lien on Founder's Founder Equity Award or the shares of Class A Common Stock underlying such awards, other than restrictions on transfer arising under applicable securities laws or as set forth or contemplated by this Agreement, the Amended and Restated Certificate of Incorporation or any other agreements to which Founder and the Company are a party.

ARTICLE III.
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

The Company hereby represents and warrants to Founder, with respect to the transactions contemplated hereby, as follows:

i. Corporate Existence and Power. The Company is a corporation duly incorporated, validly existing and in good standing under the laws of the State of Delaware.

ii. Corporate Authorization. The execution, delivery and performance by the Company of this Agreement and the consummation of the transactions contemplated hereby, including the issuance and delivery of the shares of Class B Common Stock in connection with each Exchange hereunder (including the conversion of Class B Common Stock into Class A Common Stock upon the terms specified in the Amended and Restated Certificate of Incorporation and the reclassification of Common Stock into Class A Common Stock) in accordance with the Amended and Restated Certificate of Incorporation, are within the corporate powers of the Company and have been duly authorized by all necessary corporate action on the part of the Company and the Company's stockholders, subject to compliance with Section 3.3 and the approval of and adoption by the Company's stockholders of the Amended and Restated Certificate of Incorporation. Any and all rights of first refusal or co-sale held by the Company or the Company's stockholders that are applicable to the transactions contemplated hereby have been waived or are otherwise inapplicable to the transactions contemplated in this Agreement. Assuming the due authorization, execution and delivery by Founder, this Agreement constitutes a valid and binding agreement of the Company, enforceable against the Company in accordance with its terms (subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity).

iii. Governmental Authorization. The execution, delivery and performance by the Company of this Agreement and the consummation of the transactions contemplated hereby require no action by or in respect of, or filing with, any governmental authority other than (a) the filing by the Company of the Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware and (b) compliance by the Company with any applicable requirements of any applicable state or federal securities laws.

iv. Noncontravention. The execution, delivery and performance by the Company of this Agreement and the consummation of the transactions contemplated hereby do not and will not, assuming compliance with the matters referred to in Section 3.3 and approval of and adoption by the Company's stockholders of the Amended and Restated Certificate of Incorporation, (a) violate the certificate of incorporation or bylaws of the Company, (b) violate any applicable law, (c) require any consent or other action by any person under, constitute a default under, or give rise to any right of termination, cancellation or acceleration of any right or obligation of the Company or to the loss of any benefit to which the Company

is entitled under any provision of any agreement or other instrument binding upon the Company or (d) result in the creation or imposition of any lien on the shares of Class B Common Stock other than as set forth or contemplated by this Agreement or the Amended and Restated Certificate of Incorporation.

ARTICLE IV.
COVENANTS

i. Market Stand-Off Agreement. Founder has entered into a lock-up agreement with the underwriters of the IPO with respect to the sale, disposition or transfer of Founder's securities of the Company and Founder agrees not to revoke such lock-up agreement. Founder also agrees that any other lock-up or market stand-off agreements applicable to the shares of Common Stock of the Company held by Founder will continue to apply to the shares of the Class B Common Stock in accordance with the terms of such agreements.

ARTICLE V.
GENERAL PROVISIONS

i. Governing Law. This Agreement will be governed in all respects by the internal laws of the State of Delaware as applied to agreements entered into among Delaware residents to be performed entirely within Delaware, without regard to principles of conflicts of law.

ii. Successors and Assigns. Except as otherwise provided herein, the provisions hereof will inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

iii. Entire Agreement; Amendment. Other than the rights, restrictions and preferences provided for under the Equity Documents with respect to the Founder Equity Award and the Amended and Restated Certificate of Incorporation and bylaws with respect to the shares of Class B Common Stock, this Agreement, including the exhibits attached hereto, constitute the full and entire understanding and agreement between the parties with respect to the subject matter hereof. Neither this Agreement nor any term hereof may be amended or waived other than by a written instrument signed by Founder and the Company.

iv. Counterparts. This Agreement may be executed in counterparts, each of which will be deemed an original, and all of which together will constitute one and the same instrument.

v. No Guarantee of Continued Service. Founder acknowledges and agrees that neither the execution of this Agreement nor the existence of the Put Right granted hereunder constitutes an express or implied promise of continuous employment or service with the Company for any period, or at all, and that neither the execution of this Agreement nor the existence of the Put Right granted hereunder will interfere in any way with Founder's right or the right of the Company to terminate Founder's employment or service at any time, with or without cause.

vi. Tax Consequences. The parties intend that no gain or loss will be recognized in any Exchange pursuant to Sections 368(a)(1)(E) and/or 1036 of the Code. The parties adopt this Agreement as a plan of reorganization within the meaning of Treasury Regulations Sections 1.368-2(g) and 1.368-3(a). Notwithstanding the foregoing, the Company and Founder each have reviewed with its/his own tax advisors the federal, state, local and foreign tax consequences of the Put Right and the Exchange, the Founder Equity Award and the potential acquisition of shares of Class A Common Stock thereunder, the potential exchange of such shares for shares of Class B Common Stock, and the transactions

contemplated by this Agreement. Each party hereto is relying solely on such advisors and not on any statements or representations of the Company or any of its agents, or Founder or any of his agents, as applicable, in connection with the transactions contemplated hereby, except for the representations and warranties of the Company and Founder expressly set forth in Articles II and III.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned have executed this Agreement to be effective as of the date first above written.

RECURSION PHARMACEUTICALS, INC.

By: */s/ Louisa Daniels*

Name: Louisa Daniels

Title: Chief Legal Officer

[Signature Page to Equity Exchange Right Agreement]

IN WITNESS WHEREOF, the undersigned have executed this Agreement to be effective as of the date first above written.

CHRISTOPHER GIBSON

By: */s/ Christopher Gibson*

[Signature Page to Equity Exchange Right Agreement]

EXHIBIT A

Grant Date	**Expiration Date**	**Equity Award Type**	**Number of Shares of Class A Common Stock Subject to Founder Equity Award**
12/31/2020	12/30/2030	ISO/NSO	1,500,000
Total:			**1,500,000**

EXHIBIT B

Put Right Notice (the "Notice")

(To be signed only upon exercise of a Put Right)

To: Recursion Pharmaceuticals, Inc.
Attn: Chief Legal Officer

The undersigned (the "**Founder**"), hereby irrevocably elects to exercise its right under the Put Right pursuant to the Equity Exchange Right Agreement dated as of April 20, 2021 (the "**Agreement**"), by and between Recursion Pharmaceuticals, Inc. (the "**Company**") and Founder, to require the Company to exchange _____ Put Eligible Shares (the "**Exercised Shares**") for a number of shares of Class B Common Stock of equivalent value as determined on the date of the Exchange, subject to the terms of this Notice and the Agreement. Capitalized terms not otherwise defined in the Notice will have the meaning ascribed to them in the Agreement.

By executing this Notice, Founder hereby represents and warrants to the Purchaser as follows:

1. Acknowledgements. Founder acknowledges and affirms that the representations and warranties set forth in Article II of the Agreement as of the date of this Notice are true and correct, and agrees to the covenants set forth in Article IV of the Agreement.

2. Legends. It is understood that any certificate or book entry position representing the shares of Class B Common Stock and any securities issued in respect thereof or exchange therefor, will bear legends in substantially the following form (in addition to any legend required under applicable state securities laws or agreements to which Founder is a party):

> "THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "**ACT**"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS PURSUANT TO REGISTRATION OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS."

3. Restricted Securities; Rule 144. Except as otherwise permitted by applicable law, Founder understands that any shares of Class B Common Stock issued to Founder in an Exchange will be characterized as "restricted securities" under the Act because such shares are being acquired from the Company in a transaction not involving a public offering and in exchange for shares acquired from the Company in a transaction not involving a public offering, and that under the Securities Act and the rules and regulations promulgated thereunder the shares of Class B Common Stock may be resold without registration under the Act only in certain limited circumstances, and subject to the restrictions under the Company's certificate of incorporation. Founder understands and hereby acknowledges that the shares of Class B Common Stock must be held indefinitely unless subsequently registered under the Act or an exemption from such registration is otherwise available. Founder is aware of the provisions of Rule 144 promulgated under

the Act, which permit limited resales of shares purchased in a transaction not involving a public offering, subject to the satisfaction of certain conditions.

4. Tax Matters. Founder has reviewed with his own tax advisors the federal, state, local and foreign tax consequences of the Put Right and the Exchange, the Founder Equity Award and the potential acquisition of shares of Class A Common Stock thereunder, the potential exchange of such shares for shares of Class B Common Stock, and the transactions contemplated by this Agreement. Founder is relying solely on such advisors and not on any statements or representations of the Company or any of its agents in connection with the transactions contemplated hereby, except for the representations and warranties of the Company expressly set forth in Article III of the Agreement.

Dated: __

__
Christopher Gibson

Address: __

__

Exhibit 31.1

Certification of Principal Executive Officer
Pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended

I, Christopher Gibson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Recursion Pharmaceuticals, 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)) 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) 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

(c) 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.

/s/ Christopher Gibson
Christopher Gibson, Chief Executive Officer (principal executive officer)

Date: May 12, 2021

Exhibit 31.2

Certification of Principal Financial Officer
Pursuant to Rules 13a-14(a) and 15d-14(a) of the Securities Exchange Act of 1934, as amended

I, Michael Secora, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Recursion Pharmaceuticals, 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)) 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) 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

(c) 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.

/s/ Michael Secora
Michael Secora, Chief Financial Officer (principal financial officer)

Date: May 12, 2021

Exhibit 32.1

Certifications of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of Recursion Pharmaceuticals, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Christopher Gibson
Christopher Gibson, Chief Executive Officer (principal executive officer)

/s/ Michael Secora
Michael Secora, Chief Financial Officer (principal financial officer)

Date: May 12, 2021