Confidential amended draft submitted to the U.S. Securities and Exchange Commission on January 10, 2020.

This draft registration statement has not been filed publicly with the Securities and Exchange Commission and all information contained herein remains confidential. Registration No. 333-

## **UNITED STATES** SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM S-1 REGISTRATION STATEMENT

The Securities Act of 1933

# **Revolution Medicines, Inc.**

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

2836 (Primary Standard Industrial Classification Code Number) 700 Saginaw Drive Redwood City, California 94063 (650) 481-6801

47-2029180 (I.R.S. Employer Identification Number)

X

Emerging growth company

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Mark A. Goldsmith, M.D., Ph.D. President and Chief Executive Officer Revolution Medicines, Inc. 700 Saginaw Drive Redwood City, California 94063 (650) 481-6801

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Mark V. Roeder Latham & Watkins LLP 140 Scott Drive Menlo Park, California 94025 (650) 328-4600

Alan F. Denenberg Stephen Salmon
Davis Polk & Wardwell LLP 1600 El Camino Real Menlo Park, California 94025 (650) 752-2000

Approximate date of comm	nencement of proposed sale to	the public: As soon as	practicable after the effecti	ve date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. 🗆

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  $\hfill\Box$ 

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  $\Box$ 

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.  $\Box$ 

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer X Smaller reporting company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided to Section 7(a)(2)(B) of the Securities Act.

### CALCULATION OF REGISTRATION FEE

Proposed maximum Amount of aggregate offering price(1)(2) registration fee Title of each class of securities to be registered Common Stock, \$0.0001 par value per share

- Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(o) under the Securities Act of 1933, as amended.
- Includes the aggregate offering price of additional shares that the underwriters have the option to purchase from the registrant, if any. See "Underwriting."

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where such offer or sale is not permitted.

Subject to completion, dated

. 2020

Preliminary prospectus

### shares



### Common stock

This is the initial public offering of shares of common stock of Revolution Medicines, Inc. We are selling The estimated initial public offering price is between \$ and \$ per share.

shares of our common stock.

Prior to this offering, there has been no public market for our common stock.

We have applied to list our common stock on the Nasdaq Global Market under the symbol "RVMD."

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and may elect to do so in future filings.

	Per share	Total
Initial public offering price	\$	\$
Underwriting discounts(1)	\$	\$
Proceeds, before expenses, to us	\$	\$

<sup>(1)</sup> See the section titled "Underwriting" beginning on page 215 for additional information regarding compensation payable to the underwriters.

We have granted the underwriters an option to purchase up to an additional shares from us at the initial public offering price less the underwriting discounts and commissions. The underwriters may exercise this right at any time within 30 days after the date of this prospectus.

Investing in our common stock involves a high degree of risk. See the section titled "Risk factors" beginning on page 12 to read about factors you should consider before buying shares of our common stock.

Neither the Securities and Exchange Commission nor any other state securities commission has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares against payment in New York, New York on

, 2020.

J.P. Morgan

Cowen

SVB Leerink

**Guggenheim Securities** 

**Prospectus dated** 

, 2020

### Table of contents

	Page
<u>Prospectus summary</u>	1
Risk factors	12
Special note regarding forward-looking statements	70
Market and industry data	72
<u>Use of proceeds</u>	73
<u>Dividend policy</u>	75
<u>Capitalization</u>	76
<u>Dilution</u>	78
Selected consolidated financial data	81
<u>Unaudited pro forma condensed combined financial statements</u>	83
Management's discussion and analysis of financial condition and results of operations	90
<u>Business</u>	108
<u>Management</u>	171
Executive and director compensation	180
Certain relationships and related party transactions	194
Principal stockholders	199
<u>Description of capital stock</u>	202
Shares eligible for future sale	208
Material U.S. federal income tax consequences to non-U.S. holders	211
<u>Underwriting</u>	215
<u>Legal matters</u>	226
<b>Experts</b>	226
Where you can find more information	226
Index to consolidated financial statements	F-1

Neither we nor the underwriters have authorized anyone to provide you with information that is different from that contained in this prospectus or in any free writing prospectus we may authorize to be delivered or made available to you. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell shares of common stock and seeking offers to buy shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front of this prospectus, or other earlier date stated in this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

No action is being taken in any jurisdiction outside the United States to permit a public offering of our common stock or possession or distribution of this prospectus in that jurisdiction. Persons who come into possession of this prospectus in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus applicable to that jurisdiction.

i

Revolution Medicines® and our logo are some of our trademarks used in this prospectus. This prospectus also includes trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, our trademarks, service marks and tradenames referred to in this prospectus may appear without the ® and ™ symbol, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights, or the right of the applicable licensor to these trademarks, service marks and tradenames.

Through and including , 2020 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to the obligation of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

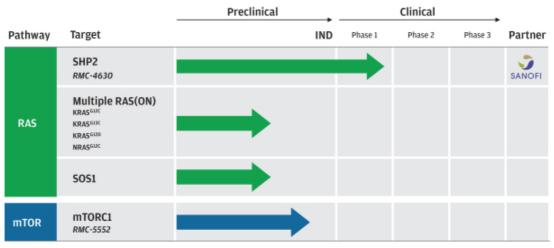
## **Prospectus summary**

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, especially the section in this prospectus titled "Risk factors" and our consolidated financial statements and the related notes thereto included at the end of this prospectus, before making an investment decision. As used in this prospectus, unless the context otherwise requires, references to "we," "our," "our company," "the Company" and "Revolution Medicines" refer to Revolution Medicines, Inc. and its subsidiary taken as a whole, and references to "Warp Drive" refer to its wholly-owned subsidiary Warp Drive Bio, Inc.

### Overview

We are a clinical-stage precision oncology company focused on developing novel targeted therapies to inhibit elusive, high-value frontier targets within notorious growth and survival pathways, with particular emphasis on the RAS and mTOR signaling pathways. We define frontier targets as proteins that play an important role in cancer and for which there is either: no approved drug that directly inhibits it, or one or more approved drugs that directly inhibit it but through a mechanism of action that may not enable suppression of the full range of its biologic contributions to cancer. Our understanding of genetic drivers and adaptive resistance mechanisms in cancer, coupled with robust drug discovery and medicinal chemistry capabilities, has guided us to establish a deep pipeline targeting critical signaling nodes within these pathways. This cohesive approach underpins our clinical strategy of exploring mechanism-based dosing paradigms and in-pathway combinations to optimize treatment for cancer patients. Our most advanced product candidate, RMC-4630, is a potent and selective inhibitor of SHP2, based on preclinical evidence described in this prospectus under the heading "Business—Our pipeline—Our SHP2 inhibitor, RMC-4630—Preclinical profile of RMC-4630." SHP2 is a central node in the RAS signaling pathway. In collaboration with Sanofi, we are evaluating RMC-4630 in a multi-cohort Phase 1/2 clinical program. This RMC-4630 Phase 1/2 program currently consists of two active clinical trials: RMC-4630-01, a Phase 1 study of RMC-4630 as a single agent, and RMC-4630-02, a Phase 1b/2 study of RMC-4630 in combination with the MEK inhibitor cobimetinib (Cotellic). In this prospectus, we report preliminary data from 63 patients who had enrolled in our Phase 1 study and received RMC-4630 as monotherapy as of November 6, 2019 and from eight patients who had enrolled in our Phase 1b/2 combination study and received RMC-4630 as of November 14, 2019. Leveraging our proprietary tri-complex technology platform, we are also developing a portfolio of mutant-selective RAS inhibitors that we believe are the first potent, selective, cell-active inhibitors of the active, GTP-bound form of RAS, or RAS(ON). These inhibitors also have exhibited anti-tumor activity in vivo in preclinical models. Initially, we will prioritize four mutant RAS(ON) targets—KRASG12C, KRASG13C, KRASG12D and NRAS<sup>G12C</sup>—and expect to nominate our first development candidate in 2020. Our pipeline also includes inhibitors of other key nodes within the RAS and mTOR signaling pathways, such as SOS1 and mTORC1. Our pipeline includes one product candidate that is in clinical development and all of our other programs are in the preclinical stage. We believe our deep, differentiated pipeline and development strategies provide us with the opportunity to pioneer novel treatment regimens to maximize the depth and durability of clinical benefit and circumvent adaptive resistance mechanisms for patients with cancers dependent on these critical pathways.

The following table summarizes our pipeline.



Under our collaboration on our SHP2 program with Sanofi, we have a 50-50 profit share and a co-promote right in the United States and are eligible to receive royalties on net sales outside of the United States. Sanofi is responsible for reimbursing substantially all of our research costs and all of our development costs for the SHP2 program. For all other programs, we retain worldwide commercial rights.

### Our opportunity and innovation engine

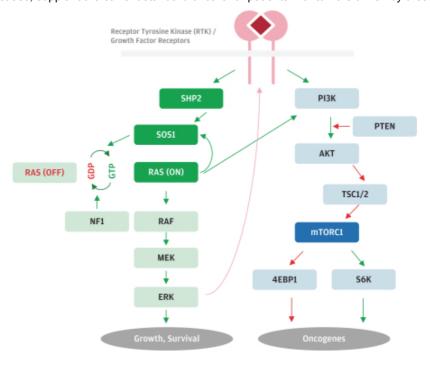
The RAS and mTOR signaling cascades are among the most frequently exploited by human cancers, where mutations in key nodes in these pathways cause excessive or aberrant signaling and cell growth. For example, mutations in RAS proteins account for approximately 30% of all human cancers in the United States, many of which are fatal. According to the National Cancer Institute, KRAS protein mutations occur in up to 35% of lung, 45% of colon and 95% of pancreatic cancers. Cancers caused by RAS-pathway mutations exhibit a phenomenon called "oncogene addiction," in which tumor cells become highly dependent on signaling through the RAS pathway to survive. The importance of the RAS pathway in cancer has led to the development of several targeted therapies that can profoundly inhibit tumor growth and cause regressions in some instances. However, cancer cells can eventually develop adaptive resistance, losing sensitivity to treatment by hijacking other cell signaling circuitry to circumvent the inhibition and restore RAS-dependent signaling. The need to overcome this resistance in treating RAS-dependent tumors has led to the use of combination regimens designed to inhibit the RAS signaling pathway at multiple nodes simultaneously in an attempt to prolong the depth and durability of clinical benefit.

Despite recent progress in targeted therapies, we believe there is a significant need and opportunity to further improve the treatment of certain cancers. We have built an innovation engine consisting of three complementary drivers that enable us to discover and develop targeted therapies for elusive, high-value *frontier* cancer targets within notorious growth and survival pathways:

Deep chemical biology and cancer pharmacology know-how, including assays and proprietary tool compounds, to define the
critical vulnerabilities of "frontier" RAS and mTOR pathway targets and associated signaling circuits in cancer cells;

- Sophisticated structure-based drug discovery capabilities, including proven access to complex chemical space, to create drug candidates tailored to unconventional binding sites on elusive cancer targets; and
- Astute **precision medicine approach**, embracing patient selection and innovative single agent and combination drug regimens, to translate our preclinical insights into clinical benefit for patients with genetically-defined cancers that are addicted to these pathways.

Focusing these drivers on a cohesive set of related disease targets provides biological, chemical and translational insights that can be leveraged to maximize the efficiency and effectiveness of our discovery and development efforts. We have built a portfolio of compounds that inhibit select signaling nodes within these pathways, including clinical targets that previously have been difficult or impossible to drug. To date, our discovery and development efforts have focused on SHP2, RAS, SOS1 and mTORC1 (these targets are shaded dark green or blue in the figure below). We believe our current and future product candidates, when used in specialized dosing paradigms and rational in-pathway combinations, will have the potential to promote profound and sustainable clinical benefit, combat adaptive resistance mechanisms and, in some cases, supplant the current standard of care for patients with tumors driven by these pathways.



### Our product candidates

### RMC-4630, a SHP2 inhibitor

Our most advanced product candidate, RMC-4630, is a potent and selective inhibitor of SHP2, based on preclinical evidence described in this prospectus. SHP2 is a protein that plays a central role in modulating cell survival and growth by transmitting signals from upstream receptor tyrosine kinases, or RTKs, to RAS. In collaboration with Sanofi, we are evaluating RMC-4630 in a multi-cohort Phase 1/2 clinical program. This

RMC-4630 Phase 1/2 program currently consists of two active clinical trials: RMC-4630-01, a Phase 1 study of RMC-4630 as a single agent, and RMC-4630-02, a Phase 1b/2 study of RMC-4630 in combination with the MEK inhibitor cobimetinib. In this prospectus, we report preliminary data from 63 patients who had enrolled in our Phase 1 study and received RMC-4630 as a monotherapy as of November 6, 2019 and from eight patients who had enrolled in our Phase 1b/2 combination study and received RMC-4630 as of November 14, 2019.

The RMC-4630-01 study is evaluating the safety, pharmacokinetics and pharmacodynamic effects of RMC-4630 as a single agent under two different dosing schedules: daily and twice weekly dosing. Fourteen patients were treated on an intermittent schedule and 49 were treated with the daily schedule. Although both dosing regimens have been reasonably well tolerated, daily dosing has been associated with more frequent and severe adverse events than the intermittent schedule. Adverse events in both schedules were consistent with the expected mechanistic effects of the product candidate; including anemia, thrombocytopenia, edema, fatigue and diarrhea. The RMC-4630-02 study is evaluating the safety, tolerability and pharmacokinetics of RMC-4630 and cobimetinib using intermittent dosing of RMC-4630 with daily dosing of cobimetinib. An alternative schedule using intermittent dosing of both RMC-4630 and cobimetinib is planned, but has not begun dosing. Adverse events were consistent with the expected mechanistic effects of both SHP2 inhibition and MEK inhibition and are similar in nature to those observed in the RMC-4630-01 study.

We also plan to explore the potential clinical benefit of RMC-4630 in combination with other in-pathway agents such as RTK (initially EGFR) and KRAS<sup>G12C</sup> inhibitors as well as in combination with PD-1 inhibitors. In November 2019, we entered into an agreement with Amgen to evaluate the combination of RMC-4630 and Amgen's KRAS<sup>G12C</sup> (OFF) inhibitor AMG 510 in a Phase 1b trial that will be conducted by Amgen. Although we are at an early stage of clinical testing and product candidate development, we believe RMC-4630 is well-positioned to become the backbone of targeted therapy combinations for the treatment of various RAS-dependent tumors.

### RAS(ON) portfolio

We are also developing a portfolio of what we believe to be the first potent, selective and cell-active inhibitors of mutant RAS(ON) proteins. Historically, direct inhibition of any RAS protein has been challenging due to a lack of tractable, or "druggable," binding pockets. Recently, selective inhibitors of inactive, GDP-bound forms of RAS, or RAS(OFF), have demonstrated encouraging preliminary anti-tumor effects and thus provide clinical validation for targeting mutant RAS in cancer. Our small molecule inhibitors of mutant RAS(ON) are derived from our proprietary tri-complex technology platform, which enables us to target proteins lacking intrinsic drug binding sites by inducing new druggable pockets. In tumor cells that are addicted to high levels of RAS activation, we believe that selective inhibitors of RAS(ON) will suppress cell growth and survival and be less susceptible to adaptive resistance mechanisms recognized for RAS(OFF) inhibitors. Initially, we will prioritize four mutant RAS(ON) targets—KRAS<sup>G12C</sup>, KRAS<sup>G13C</sup>, KRAS<sup>G12D</sup> and NRAS<sup>G12D</sup>—and expect to nominate our first development candidate in 2020. We plan to evaluate our RAS(ON) inhibitors alone and in combination with other approved drugs and investigational new drugs, particularly in-pathway agents. We believe that targeted inhibition of various oncogenic RAS(ON) mutants represents a highly differentiated approach for treating the large population of patients with diverse RAS mutations, including non-small cell lung cancer, or NSCLC, colorectal, pancreatic and other cancers.

### SOS1 and 4EBP1/mTORC1 programs

We have two preclinical programs targeting other key nodes in the RAS and mTOR signaling pathways. Our program targeting SOS1, a protein that plays a key role in converting RAS(OFF) to RAS(ON) in cells, is currently

in lead generation stage. In addition, our preclinical development candidate, RMC-5552, is designed to selectively and deeply inhibit mTORC1, thereby preventing phosphorylation and inactivation of 4EBP1, a downstream protein in the mTOR signaling pathway that normally suppresses expression of certain oncogenes such as C-MYC. We advanced RMC-5552 into IND-enabling development in June 2019.

### Our team

Our management team has significant experience in oncology and in progressing products from early stage research to clinical trials, and ultimately to regulatory approval and commercialization. Dr. Steve Kelsey, our President of Research and Development, was previously President of Onkaido Therapeutics, a Moderna venture focused on oncology mRNA therapeutics, and has held senior positions at Medivation, Geron and Genentech, where he played a significant role in the development of Perieta, Kadcyla and Erivedge, Our President and Chief Executive Officer, Dr. Mark Goldsmith, served as Chief Executive Officer of Constellation Pharmaceuticals, where he led the creation of its oncology pipeline and drove the development of a strategic alliance with Genentech. He also has led four other companies spanning early discovery through development, including Global Blood Therapeutics, where he led the discovery and early development of voxelotor. Our company was founded and continues to be supported by three world-class scientific advisors: Dr. Kevan Shokat (Professor and Chair of the Department of Cellular and Molecular Pharmacology at University of California, San Francisco, Professor of Chemistry at the University of California, Berkeley and an investigator at the Howard Hughes Medical Institute), Dr. Martin Burke (Professor of Chemistry at the University of Illinois at Urbana-Champaign) and Dr. Michael Fischbach (Associate Professor in the Department of Bioengineering at Stanford University and a Stanford ChEM-H Institute Scholar). Dr. Shokat is widely recognized for his seminal contributions to the field of kinase biology, using chemistry, protein engineering and genetic tools to pioneer novel therapeutic approaches to target key signaling pathways in cancer. He led the discovery of the first KRASG12C(OFF) inhibitor. We are also supported by a leading syndicate of investors, which include our founding investor, Third Rock Ventures, and BVF, Casdin Capital, Cormorant, Deerfield, Fidelity, Nextech, Tavistock, The Column Group and Vivo Ventures.

### Our strategy

Our goal is to develop novel targeted therapies to outsmart cancer for the benefit of patients. We plan to pursue the following strategies:

- · Deploy our innovation engine against frontier oncology targets;
- Establish our proprietary SHP2 inhibitor, RMC-4630, as the backbone of targeted therapy combinations for the treatment of RAS-dependent tumors;
- Pioneer mutant selective RAS(ON) inhibition across multiple genetically defined cancers;
- · Maximize the global value of our programs by continuing to execute synergistic and value-creating transactions; and
- Maintain our culture of tireless commitment to patients.

### Risks related to our business

Our ability to execute our business strategy is subject to numerous risks, including those described in the section titled "Risk factors" immediately following this prospectus summary. These risks include the following, among others:

- We are a clinical-stage precision oncology company with a limited operating history and no products approved for commercial sale.
   We have incurred significant losses since inception. We expect to incur losses for at least the next several years and may never achieve or maintain profitability, which, together with our limited operating history, makes it difficult to assess our future viability.
- We have never generated revenue from product sales and may never be profitable.
- Even if this offering is successful, we will require substantial additional financing to achieve our goals, which may not be available on acceptable terms, or at all. A failure to obtain this necessary capital when needed could force us to delay, limit, reduce or terminate our product development or commercialization efforts.
- We are early in our development efforts. Our business is dependent on the successful development of our current and future product candidates. If we are unable to advance our current or future product candidates through clinical trials, obtain marketing approval and ultimately commercialize any product candidates we develop, or experience significant delays in doing so, our business will be materially harmed.
- If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise be adversely affected.
- We are dependent on our collaboration with Sanofi for the development of RMC-4630 and may depend on Sanofi for the development and commercialization of any other future SHP2 inhibitor product candidates. Under certain circumstances, Sanofi may unilaterally terminate the collaboration for convenience, which would materially and adversely affect our business.
- We are developing RMC-4630 in combination with Roche's cobimetinib, and may in the future, develop RMC-4630 and other product candidates in combination with other therapies, such as Amgen's AMG 510, which exposes us to additional risks.
- We face significant competition, and if our competitors develop and market products that are more effective, safer or less expensive than the product candidates we develop, our commercial opportunities will be negatively impacted.
- If we and our collaborators are unable to obtain and maintain sufficient patent and other intellectual property protection for our product candidates and technology, our competitors could develop and commercialize products and technology similar or identical to ours, and we may not be able to compete effectively in our market or successfully commercialize any product candidates we may develop.

### **Corporate information**

We were founded in October 2014 as a Delaware corporation. Our principal executive offices are located at 700 Saginaw Drive, Redwood City, California 94063, and our telephone number is (650) 481-6801.

Our website address is www.revmed.com. The information on, or that can be accessed through, our website is not part of this prospectus and is not incorporated by reference herein. We have included our website address as an inactive textual reference only.

### Implications of being an emerging growth company

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 earliest of: (1) the last day of the fiscal year following the fifth anniversary of the consummation of this offering, (2) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.07 billion, (3) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such year or (4) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company:

- We will present in this prospectus only two years of audited annual financial statements, plus any required unaudited financial statements, and related management's discussion and analysis of financial condition and results of operations;
- We will avail ourselves of the exemption from the requirement to obtain an attestation and report from our independent registered public accounting firm on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002;
- We will provide less extensive disclosure about our executive compensation arrangements; and
- · We will not require stockholder non-binding advisory votes on executive compensation or golden parachute arrangements.

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 provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period for any other 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.

## The offering

Common stock offered by us

Underwriters' option to purchase additional shares from us

Common stock to be outstanding immediately after this offering

Use of proceeds

shares

We have granted the underwriters a 30-day option to purchase up to additional shares at the initial public offering price, less underwriting discounts and commissions.

shares (or shares if the underwriters exercise in full their option to purchase additional shares)

We estimate that the net proceeds from this offering will be approximately \$\) million, or approximately \$\) million if the underwriters exercise their option to purchase additional shares in full, at an assumed initial public offering price of \$\) per share, the midpoint of the price range set forth on the cover of this prospectus, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

We currently expect to use the net proceeds from this offering to fund the development of our multiple RAS programs, including our RAS(ON) portfolio and our SOS1 program, and our 4EBP1/mTORC1 program and other general corporate purposes, which may include the hiring of additional personnel, capital expenditures and the costs of operating as a public company. See "Use of proceeds" on page [74] for a more complete description of the intended use of proceeds from this offering.

See "Risk factors" beginning on page [13] and other information included in this prospectus for a discussion of factors that you should consider carefully before deciding to

invest in our common stock.

Risk factors

### Proposed Nasdaq Global Market symbol "RVMD"

The number of shares of common stock to be outstanding after this offering is based on 208,767,455 shares of common stock outstanding as of September 30, 2019, and excludes the following:

- 22,728,675 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2019 having a
  weighted-average exercise price of \$0.69 per share;
- 1,348,025 shares of common stock issuable upon the exercise of stock options granted after September 30, 2019 having a weighted-average exercise price of \$1.54 per share;
- 5,067,205 shares of common stock reserved for issuance pursuant to future awards under our 2014 Equity Incentive Plan, as amended, as of September 30, 2019, which will become available for issuance under our 2020 Incentive Award Plan after the consummation of this offering:
- shares of common stock reserved for issuance pursuant to future awards under our 2020 Incentive Award Plan, which will become effective on the day prior to the first public trading date of our common

stock, as well as any automatic increases in the number of shares of common stock reserved for future issuance under this plan; and

• shares of common stock reserved for issuance under our 2020 Employee Stock Purchase Plan, which will become effective on the day prior to the first public trading date of our common stock, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan.

In addition, unless we specifically state otherwise, all information in this prospectus reflects and assumes the following:

- a -for- reverse stock split of our common stock and preferred stock to be effected prior to the effectiveness of the registration statement of which this prospectus is a part;
- the conversion of all 192,699,975 shares of our outstanding preferred stock as of September 30, 2019 into an equivalent number of shares of common stock immediately upon the consummation of this offering;
- the filing and effectiveness of our amended and restated certificate of incorporation in Delaware and the adoption of our amended and restated bylaws, each of which will occur immediately upon the consummation of this offering;
- · no exercise of outstanding stock options subsequent to September 30, 2019; and
- · no exercise of the underwriters' option to purchase additional shares of common stock.

Unless otherwise specified and unless the context otherwise requires, we refer to our Series A, Series B and Series C redeemable convertible preferred stock collectively as "preferred stock" in this prospectus. For financial reporting purposes and in the financial tables included in this prospectus, we refer to our Series A, Series B and Series C redeemable convertible preferred stock collectively as "redeemable convertible preferred stock," as more fully explained in Note 8 to our consolidated financial statements included in this prospectus.

## Summary consolidated financial data

The following tables present our summary consolidated financial data. You should read this data together with our consolidated financial statements and related notes appearing elsewhere in this prospectus and the information under the captions "Selected consolidated financial data," "Unaudited pro forma condensed combined financial statements" and "Management's discussion and analysis of financial condition and results of operations."

We have derived the following consolidated summary statements of operations data for the years ended December 31, 2017 and 2018 (except for the pro forma net loss per share and the pro forma share information) from our audited consolidated financial statements and related notes appearing elsewhere in this prospectus. The summary consolidated statements of operations data for the nine months ended September 30, 2018 and 2019 and the summary consolidated balance sheet data as of September 30, 2019 are derived from our unaudited interim consolidated financial statements included elsewhere in this prospectus. The unaudited interim financial statements have been prepared in accordance with generally accepted accounting principles in the United States and on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to state fairly our financial position as of September 30, 2019 and the results of operations for the nine months ended September 30, 2018 and 2019. Our historical results are not necessarily indicative of our future results and results for the nine months ended September 30, 2019 are not necessarily indicative of results to be expected for the full year.

		Year ended December 31,		Nine months ended September 30,				
	2017 2018		2018	2018		2019		
	(in thousands, except share and per share data)							
Consolidated Statements of Operations Data:								
Revenue:								
Collaboration revenue, related party	\$	_	\$	19,420	\$	9,818	\$	37,953
Collaboration revenue, other		_		745		_		_
Total revenue		_		20,165		9,818		37,953
Operating expenses:								
Research and development		26,586		51,084		32,903		64,265
General and administrative		4,543		9,410		5,575		8,244
Total operating expenses		31,129		60,494		38,478		72,509
Loss from operations		(31,129)		(40,329)		(28,660)		(34,556
Other income (expense), net:								
Interest income		105		777		414		1,571
Interest and other expense		(103)		(116)		(83)		(83
Change in fair value of redeemable convertible preferred stock liability		_		(2,121)		(2,121)		_
Total other income (expense), net		2		(1,460)		(1,790)		1,488
Net loss	\$	(31,127)	\$	(41,789)	\$	(30,450)	\$	(33,068
Redeemable convertible preferred stock dividends—undeclared and cumulative		(3,763)		(7,031)		(4,512)		(9,987
Net loss attributable to common stockholders	\$	(34,890)	\$	(48,820)	\$	(34,962)	\$	(43,055
Net loss per share attributable to common stockholders—basic and diluted(1)	\$	(4.16)	\$	(4.36)	\$	(3.24)	\$	(3.25
Weighted-average shares used to compute net loss per share attributable to common stockholders—basic and diluted(1)	8,3	386,173	1	1,186,287	1	0,788,811	1	3,253,020
Pro forma net loss per share—basic and diluted(1)			\$	(0.35)			\$	(0.19
Weighted-average shares used in computing pro forma net loss per share—basic and diluted(1)			11	2,714,741			17	7,481,855

<sup>(1)</sup> For the calculation of our basic and diluted net loss per share attributable to common stockholders, basic and diluted pro forma net loss per share and weighted-average number of shares used in the computation of the per share amounts, see Note 12 to our consolidated financial statements included elsewhere in this prospectus.

	As	of September 30, 2019			
		·			
	Actual	Pro forma	as adjusted(1)		
		(in thousand	s)		
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	\$ 136,288	\$ 136,288	\$		
Working capital(2)	110,477	110,477			
Total assets	234,745	234,745			
Redeemable convertible preferred stock	305,114	_			
Accumulated deficit	(142,790)	(142,790)			
Total stockholders' (deficit) equity	(139,446)	165,668			

- (1) Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus), would increase (decrease) the amount of each of cash, cash equivalents and marketable securities, working capital, total assets and total stockholders' equity by \$ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase (decrease) the number of shares we are offering. Each increase (decrease) of 1,000,000 in the number of shares we are offering would increase (decrease) the amount of each of cash, cash equivalents and marketable securities, working capital, total assets and total stockholders' equity by \$ million, assuming the assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus), remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information is illustrative only and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.
- (2) We define working capital as current assets less current liabilities.

The preceding table presents our consolidated balance sheet data as of September 30, 2019:

- · on an actual basis;
- on a pro forma basis to give effect to: (i) the conversion of all 192,699,975 shares of our redeemable convertible preferred stock outstanding as of September 30, 2019 into an equivalent number of shares of our common stock, which will be effective upon the closing of this offering; and (ii) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur immediately prior to the consummation of this offering; and
- on a pro forma as adjusted basis to give further effect to the sale of shares of common stock in this offering at an assumed initial public offering price of \$ per share, the midpoint of the price range set forth on the cover of this prospectus, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

### Risk factors

Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our consolidated financial statements and the related notes and "Management's discussion and analysis of financial condition and results of operations," before deciding whether to invest in our common stock. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and growth prospects. In such an event, the market price of our common stock could decline, and you may lose all or part of your investment.

### Risks related to our limited operating history, financial position and need for additional capital

We are a clinical-stage precision oncology company with a limited operating history and no products approved for commercial sale. We have incurred significant losses since inception. We expect to incur losses for at least the next several years and may never achieve or maintain profitability, which, together with our limited operating history, makes it difficult to assess our future viability.

Biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We are a clinical-stage precision oncology company, and we have only a limited operating history upon which you can evaluate our business and prospects. We currently have no products approved for commercial sale, have not generated any revenue from sales of products and have incurred losses in each year since our inception in October 2014. In addition, we have limited experience as a company and have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical industry. Only one of our product candidates, RMC-4630, is currently in clinical development.

Since inception, we have incurred significant net losses. Our net losses were \$31.1 million for the year ended December 31, 2017, \$41.8 million for the year ended December 31, 2018 and \$33.1 million for the nine months ended September 30, 2019. As of September 30, 2019, we had an accumulated deficit of \$142.8 million. We have funded our operations to date primarily with proceeds from the sale of preferred stock and upfront payments and research and development cost reimbursement received under our collaboration agreement with Genzyme Corporation, an affiliate of Sanofi, or the Sanofi Agreement. To date, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, acquiring and discovering development programs, securing intellectual property rights and conducting discovery, research and development activities for our programs. We have not yet demonstrated our ability to successfully complete any clinical trials, including pivotal clinical trials, obtain marketing 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 product commercialization. Our product candidates will require substantial additional development time and resources before we will be able to apply for or receive regulatory approvals and, if approved, begin generating revenue from product sales. We expect to continue to incur significant expenses and operating losses for the foreseeable future.

### We have never generated revenue from product sales and may never be profitable.

Our ability to generate revenue from product sales and achieve profitability depends on our ability, alone or with our collaboration partners, to successfully complete the development of, and obtain the regulatory approvals necessary to commercialize, our development programs. We do not anticipate generating revenue from product sales for the next several years, if ever. Our ability to generate future revenue from product sales depends heavily on our, Sanofi's, and any potential future collaborators' success in:

 completing clinical and preclinical development of product candidates and programs and identifying and developing new product candidates;

- seeking and obtaining marketing approvals for any product candidates that we develop;
- launching and commercializing product candidates for which we obtain marketing approval by establishing a sales force, marketing, medical affairs and distribution infrastructure or, alternatively, collaborating with a commercialization partner;
- achieving adequate coverage and reimbursement by third-party payors for product candidates that we develop:
- establishing and maintaining supply and manufacturing relationships with third parties that can provide adequate, in both amount and quality, products and services to support clinical development and the market demand for product candidates that we develop, if approved;
- obtaining market acceptance of product candidates that we develop as viable treatment options;
- addressing any competing technological and market developments;
- negotiating favorable terms in any collaboration, licensing or other arrangements into which we may enter and performing our obligations in such collaborations;
- maintaining, protecting, enforcing and expanding our portfolio of intellectual property rights, including patents, trade secrets and know-how;
- · defending against third-party interference, infringement or other intellectual property-related claims, if any; and
- · attracting, hiring and retaining qualified personnel.

Even if one or more of the product candidates that we develop is approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate. Our expenses could increase beyond expectations if we are required by the U.S. Food and Drug Administration, or the FDA, the European Medicines Agency, or the EMA, or other regulatory agencies to perform clinical trials or studies in addition to those that we currently anticipate. Even if we are able to generate revenue from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations.

Even if this offering is successful, we will require substantial additional financing to achieve our goals, which may not be available on acceptable terms, or at all. A failure to obtain this necessary capital when needed could force us to delay, limit, reduce or terminate our product development or commercialization efforts.

Our operations have consumed substantial amounts of cash since inception. Since our inception, we have invested a significant portion of our efforts and financial resources in research and development activities for our initial preclinical and clinical product candidates. Preclinical studies and clinical trials and additional research and development activities will require substantial funds to complete. As of September 30, 2019, we had cash, cash equivalents and marketable securities of \$136.3 million. We expect to continue to spend substantial amounts to continue the preclinical and clinical development of our current and future programs. If we are able to gain marketing approval for product candidates that we develop, including RMC-4630, we will require significant additional amounts of cash in order to launch and commercialize such product candidates to the extent that such launch and commercialization are not the responsibility of Sanofi or another collaborator that we may contract with in the future. In addition, other unanticipated costs may arise. Because the design and outcome of our planned and anticipated clinical trials is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of any product candidate we develop.

Our future capital requirements depend on many factors, including:

- the scope, progress, results and costs of researching and developing our product candidates and programs, and of conducting preclinical studies and clinical trials;
- the timing of, and the costs involved in, obtaining marketing approvals for product candidates we develop if clinical trials are successful;
- the success of our collaboration with Sanofi, including the continued reimbursement by Sanofi of substantially all of our research costs and all of our development costs for the SHP2 program under the Sanofi Agreement;
- whether we achieve certain clinical and regulatory milestones under the Sanofi Agreement, each of which would trigger additional
  payments to us;
- the cost of commercialization activities for RMC-4630, to the extent not borne by Sanofi, and any other future product candidates we
  develop, whether alone or in collaboration, including marketing, sales and distribution costs if RMC-4630 or any other product candidate we
  develop is approved for sale;
- the cost of manufacturing our current and future product candidates for clinical trials in preparation for marketing approval and in preparation for commercialization;
- · our ability to establish and maintain strategic licenses or other arrangements and the financial terms of such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, expanding, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;
- · the timing, receipt and amount of sales of, profit share or royalties on, our future products, if any;
- · the emergence of competing cancer therapies and other adverse market developments; and
- any plans to acquire or in-license other programs or technologies.

Other than our Sanofi collaboration on SHP2 inhibitors, including RMC-4630, we do not have any committed external source of funds or other support for our development efforts. We expect to finance our cash needs through a combination of public or private equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing or distribution arrangements. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. Based on our research and development plans, we expect that the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, will enable us to fund our operations for at least 12 months following the date of this offering.

Our ability to raise additional funds will depend on financial, economic and other factors, many of which are beyond our control. Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis, we may be required to:

- delay, limit, reduce or terminate preclinical studies, clinical trials or other research and development activities or eliminate one or more of our development programs altogether; or
- delay, limit, reduce or terminate our efforts to establish manufacturing and sales and marketing capabilities or other activities that may be
  necessary to commercialize any future approved products, or reduce our flexibility in developing or maintaining our sales and marketing
  strategy.

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

To date, we have primarily financed our operations through the sale of preferred stock and upfront payments and research and development cost reimbursement received in connection with our collaboration with Sanofi. We will be required to seek additional funding in the future and currently intend to do so through collaborations, public or private equity offerings or debt financings, credit or loan facilities or a combination of one or more of these funding sources. If we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish certain valuable rights to our product candidates, technologies, future revenue streams or research programs or grant licenses on terms that may not be favorable to us. If we raise additional funds by issuing equity securities, our stockholders may suffer dilution and the terms of any financing may adversely affect the rights of our stockholders. In addition, as a condition to providing additional funds to us, future investors may demand, and may be granted, rights superior to those of existing stockholders. Debt financing, if available, is likely to involve restrictive covenants limiting our flexibility in conducting future business activities, and, in the event of insolvency, debt holders would be repaid before holders of our equity securities received any distribution of our corporate assets. Attempting to secure additional financing may also divert our management from our day-to-day activities, which may adversely affect our ability to develop our product candidates.

# Our operating results may fluctuate significantly, which will make our future results difficult to predict and could cause our results to fall below expectations.

Our quarterly and annual operating results may fluctuate significantly, which will make it difficult for us to predict our future results. These fluctuations may occur due to a variety of factors, many of which are outside of our control and may be difficult to predict, including:

- the timing and cost of, and level of investment in, research, development and commercialization activities, which may change from time to time:
- · the timing and status of enrollment for our clinical trials;
- · the timing of regulatory approvals, if any, in the United States and internationally;
- the timing of expanding our operational, financial and management systems and personnel, including personnel to support our clinical development, quality control, manufacturing and commercialization efforts and our operations as a public company;
- the cost of manufacturing, as well as building out our supply chain, which may vary depending on the quantity of productions, and the terms of any agreements we enter into with third-party suppliers;
- timing and amount of any milestone, royalty or other payments due under any current or future collaboration or license agreement, including the Sanofi Agreement;
- coverage and reimbursement policies with respect to any future approved products, and potential future drugs that compete with our products;
- the timing and cost to establish a sales, marketing, medical affairs and distribution infrastructure to commercialize any products for which we may obtain marketing approval and intend to commercialize on our own or jointly with Sanofi;
- expenditures that we may incur to acquire, develop or commercialize additional products and technologies;

- the level of demand for any future approved products, which may vary significantly over time;
- · future accounting pronouncements or changes in our accounting policies; and
- the timing and success or failure of preclinical studies and clinical trials for our product candidates or competing product candidates, or any
  other change in the competitive landscape of our industry, including consolidation among our competitors or collaboration partners.

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

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

### Risks related to product development and regulatory process

We are early in our development efforts. Our business is dependent on the successful development of our current and future product candidates. If we are unable to advance our current or future product candidates through clinical trials, obtain marketing approval and ultimately commercialize any product candidates we develop, or experience significant delays in doing so, our business will be materially harmed.

We are early in our development efforts, and we have only recently initiated our first clinical trials for our most advanced product candidate, RMC-4630. Our other programs are in the preclinical stage. We have invested substantially all of our efforts and financial resources in the identification of targets and preclinical development of small molecules to treat cancer.

The success of our business, including our ability to finance our company and generate revenue from products in the future, which we do not expect will occur for several years, if ever, will depend heavily on the successful development and eventual commercialization of the product candidates we develop, which may never occur. Our current product candidates, and any future product candidates we develop, will require additional preclinical and clinical development, management of clinical, preclinical and manufacturing activities, marketing approval in the United States and other markets, demonstrating effectiveness to pricing and reimbursement authorities, obtaining sufficient manufacturing supply for both clinical development and commercial production, building of a commercial organization, and substantial investment and significant marketing efforts before we generate any revenues from product sales.

We have not previously submitted a new drug application, or NDA, to the FDA or similar approval filings to a comparable foreign regulatory authority, for any product candidate. An NDA or other relevant regulatory filing must include extensive preclinical and clinical data and supporting information to establish that the product candidate is safe and effective for each desired indication. The NDA or other relevant regulatory filing must also include significant information regarding the chemistry, manufacturing and controls for the product. We cannot be certain that our current or future product candidates will be successful in clinical trials or receive regulatory approval. Further, even if they are successful in clinical trials, our product candidates or any future product candidates may not receive regulatory approval. If we do not receive regulatory approvals for current or future product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approval to market a product candidate, our revenue will depend, in part, upon the size of the markets in the

territories for which we gain regulatory approval and have commercial rights, as well as the availability of competitive products, whether there is sufficient third-party reimbursement and adoption by physicians.

We plan to seek regulatory approval to commercialize our product candidates both in the United States and in select foreign countries. While the scope of regulatory approval generally is similar in other countries, in order to obtain separate regulatory approval in other countries we must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy. Other countries also have their own regulations governing, among other things, clinical trials and commercial sales, as well as pricing and distribution of drugs, and we may be required to expend significant resources to obtain regulatory approval and to comply with ongoing regulations in these jurisdictions.

The success of our current and future product candidates will depend on several factors, including the following:

- · successful completion of clinical trials and preclinical studies;
- sufficiency of our financial and other resources to complete the necessary preclinical studies and clinical trials;
- acceptance of investigational new drug applications, or INDs, for our planned clinical trials or future clinical trials;
- successful enrollment and completion of clinical trials, particularly where competitors may also be recruiting patients with KRAS<sup>G12C</sup> mutations:
- successful data from our clinical program that supports an acceptable risk-benefit profile of our product candidates in the intended populations;
- receipt and maintenance of marketing approvals from applicable regulatory authorities;
- establishing agreements with third-party manufacturers for clinical supply for our clinical trials and commercial manufacturing, if our product candidate is approved;
- · entry into collaborations to further the development of our product candidates;
- obtaining and maintaining our portfolio of intellectual property rights, including patents, trade secrets and know-how;
- · enforcing and defending intellectual property rights and claims;
- · obtaining and maintaining regulatory exclusivity for our product candidates;
- · successfully launching commercial sales of our product candidates, if approved;
- · acceptance of the product candidate's benefits and uses, if approved, by patients, the medical community and third-party payors;
- the prevalence, duration and severity of potential side effects or other safety issues experienced with our product candidates following approval;
- · effectively competing with other therapies; and
- · obtaining and maintaining healthcare coverage and adequate reimbursement from third-party payors.

If we are not successful with respect to one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize the product candidates we develop, which would materially harm our business. If we do not receive marketing approvals for RMC-4630, or any other product candidate we develop, we may not be able to continue our operations.

Preclinical development is uncertain. Our preclinical programs may experience delays or may never advance to clinical trials, which would adversely affect our ability to obtain regulatory approvals or commercialize our product candidates on a timely basis or at all, which would have an adverse effect on our business.

In order to obtain FDA approval to market a new small molecule product we must demonstrate proof of safety and efficacy in humans. To meet these requirements, we will have to conduct adequate and well-controlled clinical trials. Before we can commence clinical trials for a product candidate, we must complete extensive preclinical studies that support our planned INDs in the United States. We only have one product candidate in clinical development and the rest of our programs are in preclinical research or development, including our RAS portfolio and RMC-5552 product candidate. We cannot be certain of the timely completion or outcome of our preclinical studies and cannot predict if the FDA will accept our proposed clinical programs or if the outcome of our preclinical studies will ultimately support further development of our programs. As a result, we cannot be sure that we will be able to submit INDs or similar applications on the timelines we expect, if at all, and we cannot be sure that submission of INDs or similar applications will result in the FDA or other regulatory authorities allowing additional clinical trials to begin.

Conducting preclinical testing is a lengthy, time-consuming and expensive process. The length of time may vary substantially according to the type, complexity and novelty of the program, and often can be several years or more per program. Delays associated with programs for which we are directly conducting preclinical studies may cause us to incur additional operating expenses. Moreover, we may be affected by delays associated with the studies of certain programs that are the responsibility of Sanofi or our potential future partners over which we have no control. The commencement and rate of completion of preclinical studies and clinical trials for a product candidate may be delayed by many factors, including, for example:

- inability to generate sufficient preclinical or other in vivo or in vitro data to support the initiation of clinical studies;
- delays in reaching a consensus with regulatory agencies on study design and obtaining regulatory authorization to commence clinical trials;
   and
- obtaining sufficient quantities of our product candidates for use in preclinical studies and clinical trials from third-party suppliers on a timely basis.

Moreover, even if clinical trials do begin for our preclinical programs, our development efforts may not be successful, and clinical trials that we conduct or that third parties conduct on our behalf may not demonstrate sufficient safety or efficacy to obtain the requisite regulatory approvals for any product candidates we develop. Even if we obtain positive results from preclinical studies or initial clinical trials, we may not achieve the same success in future trials.

Some of our programs focus on the discovery and development of "Beyond Rule of 5" small molecules. Such molecules can be associated with longer development timelines and greater costs compared to traditional small molecule drugs. Our "Beyond Rule of 5" product candidates may take longer to develop and/or manufacture relative to traditional small molecules, and we may not be able to formulate "Beyond Rule of 5" candidates for certain routes of administration.

We enlist various technologies and capabilities that give us chemical access to challenging sites on target proteins that generally are not accessible using conventional small molecule drug discovery approaches. For

each target, we consider the specific structural, physico-chemical, functional and dynamic properties of the target and deploy the approach or approaches that appear most likely to yield viable development candidates. The "Rule of 5" is a set of criteria used in pharmaceutical drug development to determine whether chemical compounds have certain physico-chemical properties that make them likely to be orally active drugs in humans. In some instances, the compounds we discover and develop are traditional small molecules (i.e. less than 500 daltons) with properties that generally satisfy conventional pharmaceutical "Rule of 5" criteria, while in other cases, they are larger (i.e. 500-1000 daltons) "Beyond Rule of 5", or BRo5, compounds that by definition do not satisfy these criteria. For example, our mTORC1 program and our RAS(ON) program each include pursuit of BRo5 compounds.

BRo5 compounds have been successfully pursued by many pharmaceutical companies. Examples of BRo5 compounds include natural products and semi-synthetic derivatives, peptidomimetics, macrocycles and degraders. However, larger molecular weight small molecules often cannot be formulated into orally absorbed drugs and also often face solubility, potency, bioavailability and stability challenges, among others. In addition, many of the commonly used predictive and other drug development tools are designed specifically for small molecule drugs rather than larger molecules, contributing to the difficulty and uncertainty of development of BRo5 compounds.

Due to their size and complexity, drug development of our BRo5 compounds may be slower and/or more expensive than drug development of traditional "Rule of 5" compounds, resulting in program delays, increased costs or failure to obtain regulatory approval in a commercially reasonable timeframe, if at all. Our competitors developing traditional small molecules in areas where we are developing BRo5 compounds could obtain regulatory approval and reach the market before we do. Even if we succeed in generating an approved drug from a BRo5 compound, it may be less convenient to administer, have higher grade and/or more frequent side effects or be more costly to manufacture and formulate than competing products on the market. The discovery and development of BRo5 small molecules may pose risks to us such as:

- BRo5 small molecules may present difficult synthetic chemistry and manufacturing challenges, including with any scale-up of our product candidates in sufficient quality and quantity;
- BRo5 small molecules may be challenging to purify, including with any scale-up of our product candidates in sufficient quality and quantity;
- BRo5 small molecules may present solubility challenges in the development of any such small molecules;
- BRo5 small molecules may present oral absorption challenges due to low passive permeability;
- BRo5 small molecules may present cell permeability challenges, especially with regards to lipophilicity, hydrogen bond donor and rotatable bond count, and high topological polar surface area;
- Any BRo5 small molecules we seek to develop may not achieve acceptable oral bioavailability for development and may result in poor pharmaceutical properties for formulation development;
- Any BRo5 small molecules we seek to develop may have a propensity to be substrates for efflux proteins such as the adenosine
  triphosphate (ATP) binding cassette (ABC) transporter protein family, including multidrug resistance protein 1. Cancer cells may
  overexpress these transporter proteins causing an increase in expulsion of our product candidate from the cell. As the site of action of our
  product candidates, for example the RAS protein, is inside the cell, expulsion by these transporter proteins may decrease the effective
  concentration in the cell sufficiently to reduce target inhibition and thereby render a RAS-dependent tumor less susceptible to the inhibitory
  activity of the product candidate;
- BRo5 small molecules may present central nervous system, or CNS, penetration challenges due to low passive permeability and/or interaction with efflux transporters at the blood brain barrier and this could limit sensitivity of CNS tumors to our product candidates;

- BRo5 small molecules may present formulation vehicle challenges for administration, such as intravenous and subcutaneous administration, due to aspects such as solubility and hydrophobicity;
- BRo5 small molecules may present stability and shelf-life limitations due to the incorporation of labile functionality in our scaffolds, including
  for example in the development of RMC-5552 which currently requires a cold chain storage of zero degrees Celsius; and
- BRo5 small molecules may present off-target toxicities due to physico-chemical properties such as lipophilicity, which is the ability to
  dissolve fats, oils and lipids, the presence of off-target pharmacophores in the molecule that can interact with other cellular proteins, or
  other characteristics that have not been fully characterized within a novel chemical scaffold or platform.

These and other risks related to our research and development of BRo5 small molecules may result in delays in development, an increase in development costs and/or the failure to develop any BRo5 small molecule to approval. As a result, our competitors may develop products more rapidly and cost effectively than we do. In particular, competitors may develop and commercialize a product that competes with a product candidate we may develop from our RAS(ON) program as some of our competitors in this area are pursuing conventional small molecules directed to other forms of RAS, such as RAS(OFF), and are further along in development than we currently are. Any such setbacks in our research and development of a BRo5 small molecule could have a material adverse effect on our business and operating results.

The regulatory approval processes of the FDA, the EMA and comparable foreign authorities are lengthy, time-consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA, the EMA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. We have not obtained regulatory approval for any product candidate and it is possible that none of our current or future product candidates will ever obtain regulatory approval.

Our current and future product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA, the EMA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA, the EMA or comparable foreign regulatory authorities that a product candidate is safe or effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA, the EMA or comparable foreign regulatory authorities for approval;
- · we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA, the EMA or comparable foreign regulatory authorities may disagree with our interpretation of data from clinical trials or preclinical studies:
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of an NDA to the FDA or other submission or to obtain regulatory approval in the United States, the European Union or elsewhere;

- the FDA, the EMA 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, the EMA or comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process as well as the unpredictability of clinical trial results may result in our failing to obtain regulatory approval to market any product candidate we develop, which would significantly harm our business, results of operations and prospects. The FDA, the EMA and other comparable foreign authorities have substantial discretion in the approval process, and determining when or whether regulatory approval will be obtained for any product candidate that we develop. Even if we believe the data collected from future clinical trials of our product candidates are promising, such data may not be sufficient to support approval by the FDA, the EMA or any other regulatory authority.

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

Further, we have not previously submitted a NDA to the FDA, or a Marketing Authorization Application, or MAA, to the EMA. We cannot be certain that any of our programs will be successful in clinical trials or receive regulatory approval. Further, product candidates we develop may not receive regulatory approval even if they are successful in clinical trials. If we do not receive regulatory approvals for our product candidates, we may not be able to continue our operations.

Clinical product development involves a lengthy and expensive process, with uncertain outcomes. We may experience delays in completing, or ultimately be unable to complete, the development and commercialization of our current and future product candidates.

To obtain the requisite regulatory approvals to commercialize any of our product candidates, we must demonstrate through extensive preclinical studies and clinical trials that our products are safe or effective in humans. 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 and our future clinical trial results may not be successful.

We may experience delays in completing our clinical trials or preclinical studies and initiating or completing additional clinical trials. We may also experience numerous unforeseen events during our clinical trials that could delay or prevent our ability to receive marketing approval or commercialize the product candidates we develop, 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 number of patients required for clinical trials may be larger than we anticipate:
- it may be difficult to enroll a sufficient number of patients with mutations in the signaling pathways our therapies are designed to target, or 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 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;
- the supply or quality of materials for product candidates we develop or other materials necessary to conduct clinical trials may be insufficient or inadequate; and
- · our collaborators may delay the development process by waiting to take action or focusing on other priorities.

We could encounter delays if a clinical trial is suspended or terminated by us, by the IRBs or ethics committees of the institutions in which such trials are being conducted, by the Data Safety Monitoring Board, or DSMB, for such trial or by the FDA or other regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, 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 cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of marketing approval of our product candidates.

If we experience delays in the completion of, or termination of, any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenues from any of these product candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow down our product candidate development and approval process and jeopardize our ability to commence product sales and generate revenues. Significant clinical trial delays could also allow our competitors to bring products to market before we do or shorten any periods during which we have the exclusive right to commercialize our product candidates and impair our ability to commercialize our product candidates and may harm our business and results of operations.

In addition, based on our own preclinical data and supported by observations by others, we are evaluating intermittent dosing schedules in our clinical program to allow us to maximize dose intensity and the depth of response. When dosed in clinical trials, this intermittent dosing approach may reduce patient compliance.

Any of these occurrences may harm our business, financial condition and prospects significantly. In addition, many of the factors that 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 product candidates or result in the development of our product candidates being stopped early.

Historically, direct inhibition of any RAS protein itself has been challenging due to a lack of tractable, or "druggable," binding pockets and we are not aware of any programs in clinical development that have successfully targeted any RAS(ON) protein. Given this approach is unproven, it may not be successful.

Historically, direct inhibition of any RAS protein has been challenging due to a lack of tractable, or "druggable," binding pockets. Our tri-complex technology has enabled us to develop what we believe to be the first potent, selective cell-active inhibitors of multiple mutant RAS(ON) proteins. We are not aware of any programs in clinical development that have successfully targeted any RAS(ON) protein. We cannot be certain that our approach will lead to the development of approvable or marketable products, alone or in combination with other therapies.

### The results of preclinical studies and early-stage clinical trials may not be predictive of future results.

The results of preclinical studies may not be predictive of the results of clinical trials, and the results of any early-stage clinical trials we commence may not be predictive of the results of the later-stage clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy despite having progressed through preclinical studies and initial clinical trials. 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 product candidates. There is a high failure rate for drugs proceeding through clinical trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in clinical development even after achieving promising results in earlier studies. Even if our clinical trials are completed, the results may not be sufficient to obtain regulatory approval of any products. Any such setbacks in our clinical development could have a material adverse effect on our business and operating results.

### Interim, "topline" and preliminary data from our clinical trials may differ materially from the final data.

From time to time, we may disclose interim 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 patient enrollment continues and more data on existing patients become available. For example, we have reported interim Phase 1 clinical data for RMC-4630 as a single agent. As of the cutoff date, 63 patients had received treatment: 49 patients on a daily dosing schedule with a median exposure to study drug of only 1.8 months, and 14 patients on an intermittent dosing schedule, with median exposure to study drug of only 1.6 months. We have also reported interim Phase 1b/2 clinical data for RMC-4630 in combination with the MEK inhibitor cobimetinib. As of the cutoff date, these data included eight patients with median exposure to study drug of only 1.4 months. Our clinical trial program is ongoing, and the final results may be materially different from what is reported in this prospectus. Adverse differences between interim data and final data could significantly harm our business, financial condition, results of operations and prospects. From time to time, we may also publicly disclose preliminary or "topline" data from our clinical trials, which are based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the topline results that we report may differ from future results of the same clinical trials, or different conclusions or considerations may qualify such topline results, once additional data have been received and fully evaluated. Topline 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, topline data should be viewed with caution until the final data are available.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and the value of our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is typically a summary of extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product, product candidate or our business. If the topline data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could harm our business, financial condition, operating results and prospects.

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

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons. The enrollment of patients depends on many factors, including:

- · the patient eligibility criteria defined in the protocol;
- our ability to enroll a sufficient number of patients with mutations in the signaling pathways our therapies are designed to target;
- the size of the patient population required for analysis of the trial's primary endpoints;
- · the proximity of patients to study sites;
- · the design of the trial;
- · our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new products that may be approved for the indications we are investigating;
- our ability to obtain and maintain patient consents for participation in our clinical trials and, where appropriate, biopsies for future patient enrichment efforts; and
- the risk that patients enrolled in clinical trials will not remain on the trial through the completion of evaluation.

In addition, our clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas (and that seek to evaluate patients with cancer cells having the same mutations, particularly with patients having KRAS<sup>G12C</sup> mutations) as our current and potential future product candidates. This competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials at such sites. Moreover, because our current and potential future product candidates may represent a departure from more commonly used methods for cancer treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy, rather than enroll patients in our ongoing or any future clinical trial.

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

Our current or future product candidates may cause undesirable side effects or have other properties when used alone or in combination with other approved products or investigational new drugs that could delay or halt their clinical development, prevent their marketing approval, limit their commercial potential or result in significant negative consequences.

Undesirable or clinically unmanageable side effects could occur and cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of

marketing approval by the FDA or comparable foreign regulatory authorities. Results of our trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics.

The RMC-4630-01 study is evaluating the safety, pharmacokenetics and pharmacodynamic effects of RMC-4630 as a single agent under two different dosing schedules: daily and intermittent. For those receiving RMC-4630 on the intermittent dosing schedule, there was one treatment-related serious adverse event, or SAE, (grade 3 abdominal distention) as of the cutoff date. No treatment-related grade 4 or grade 5 adverse events, or AEs, had been reported as of the cutoff date. The most common treatment related AEs for the intermittent dosing group were anemia (35.7%), fatigue (35.7%), thrombocytopenia (35.7%) and edema (28.6%). For those receiving RMC-4630 on the daily schedule, three SAEs were deemed possibly or probably related to the treatment (dehydration, anasarca (generalized edema) and thrombocytopenia), and an additional three SAEs (extensive metastases of tumor in the lungs with grade 4 respiratory failure, fever and radiologic evidence of infectious pneumonia with grade 4 respiratory failure and a single reading of grade 3 prologation of QTc) were reported in which the investigator was unable to rule out an association with the treatment. The most common treatment related AEs for the daily dosing group were thrombocytopenia (28.6%), diarrhea (24.5%) and anemia (22.4%).

The RMC-4630-02 study evaluates the safety, tolerability and pharmacokinetics of RMC-4630 and cobimetinib using intermittent dosing of RMC-4630 with daily dosing of cobimetinib. An alternative schedule using intermittent dosing of both RMC-4630 and cobimetinib is planned, but has not begun dosing. Adverse events were consistent with the expected mechanistic effects of both SHP2 inhibition and MEK inhibition. No SAEs or grade 4 or 5 AEs were reported in the RMC-4360-02 study as of the cutoff date. The most common AEs related to RMC-4630 were diarrhea (25.0%) and edema (25.0%). The most common AE related to cobimetinib was edema (25.0%).

Although our current and future product candidates will undergo safety testing to the extent possible and, where applicable, under such conditions discussed with regulatory authorities, not all adverse effects of drugs can be predicted or anticipated. Unforeseen side effects could arise either during clinical development or, if such side effects are more rare, after our products have been approved by regulatory authorities and the approved product has been marketed, resulting in the exposure of additional patients. So far, we have not previously demonstrated that RMC-4630 or any other product candidate is safe in humans, and we cannot predict if ongoing or future clinical trials will do so.

Furthermore, certain of our product candidates, such as RMC-4630, are currently being, and may in the future be, co-administered with approved or experimental therapies, such as Roche's cobimetinib or Amgen's AMG 510. These combinations may have additional side effects. The uncertainty resulting from the use of our product candidates in combination with other therapies may make it difficult to accurately predict side effects in future clinical trials.

If any of our product candidates receives marketing approval and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- · regulatory authorities may withdraw their approval of the product;
- · we may be required to recall a product or change the way such product is administered to patients;
- additional restrictions may be imposed on the marketing of the particular product or the manufacturing processes for the product or any component thereof;
- regulatory authorities may require the addition of labeling statements, such as a "black box" warning or a contraindication;
- we may be required to implement a Risk Evaluation and Mitigation Strategy, or REMS, or create a Medication Guide outlining the risks of such side effects for distribution to patients;

- · we could be sued and held liable for harm caused to patients;
- · the product may become less competitive; and
- · our reputation may suffer.

Any of the foregoing events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and result in the loss of significant revenues to us, which would adversely affect our business, financial condition, results of operations and prospects. In addition, if one or more of our product candidates prove to be unsafe, our entire technology platform and pipeline could be affected, which would have a material adverse effect on our business, financial condition, results of operations and prospects.

Even if we complete the necessary preclinical studies and clinical trials, the marketing approval process is expensive, time-consuming and uncertain and may prevent us or any of our existing or future collaboration partners from obtaining approvals for the commercialization of RMC-4630 and any other product candidate we develop.

Any current or future product candidate we may develop and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, and distribution, are subject to comprehensive regulation by the FDA and other regulatory authorities in the United States and by comparable authorities in other countries. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate in a given jurisdiction. We have not received approval to market any product candidates from regulatory authorities in any jurisdiction and it is possible that none of our current or future product candidates will ever obtain regulatory approval. We have no experience in filing and supporting the applications necessary to gain marketing approvals and expect to rely on third-party CROs 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 product 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. Any product candidates we develop 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.

The process of obtaining marketing approvals, both in the United States and abroad, is expensive, may take many years if additional clinical trials are required, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity, and novelty of the product 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 product application, 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. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit, or prevent marketing approval of a product candidate. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

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

Obtaining and maintaining marketing approval of our current and future product candidates in one jurisdiction does not mean that we will be successful in obtaining marketing approval of our current and future product candidates in other jurisdictions.

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

We may also submit marketing applications in other countries. Regulatory authorities in jurisdictions outside of the United States have requirements for approval of product candidates with which we must comply prior to marketing in those jurisdictions. Obtaining foreign marketing approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we fail to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

Adverse events in the field of oncology could damage public perception of our current or future product candidates and negatively affect our business.

The commercial success of our products will depend in part on public acceptance of the use of targeted cancer therapies. While a number of targeted cancer therapies have received regulatory approval and are being commercialized, our approach to targeting cancer cells carrying tumor causing mutations, including oncogenic RAS(ON) pathway mutations, is novel and unproven. Adverse events in clinical trials of our product candidates, or post-marketing activities, or in clinical trials of others developing similar products and the resulting publicity, as well as any other adverse events in the field of oncology that may occur in the future, could result in a decrease in demand for any product that we may develop. If public perception is influenced by claims that the use of cancer therapies is unsafe, whether related to our therapies or those of our competitors, our products may not be accepted by the general public or the medical community.

Future adverse events in oncology or the biopharmaceutical industry could also result in greater governmental regulation, stricter labeling requirements and potential regulatory delays in the testing or approvals of our products. Any increased scrutiny could delay or increase the costs of obtaining marketing approval for the product candidates we develop.

Even if we receive marketing approval of a product candidate, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products, if approved.

Any marketing approvals that we receive for any current or future product candidate may be subject to limitations on the approved indicated uses for which the product may be marketed or the conditions of approval, or contain requirements for potentially costly post-market testing and surveillance to monitor the

safety and efficacy of the product candidate. The FDA may also require REMS as a condition of approval of any product candidate, which could include requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves a product candidate, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import and export and record keeping for the product candidate will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with current Good Manufacturing Practice, or cGMP, and Good Clinical Practice, or GCP, for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with any approved candidate, 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 product recalls;
- · fines, untitled and warning letters, or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications we filed or suspension or revocation of license approvals;
- · product seizure or detention, or refusal to permit the import or export of the product; and
- · injunctions or the imposition of civil or criminal penalties.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay marketing approval of a product. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. 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, and we may not achieve or sustain profitability.

Even if a current or future product candidate receives marketing approval, it may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success.

If any current or future product candidate we develop receives marketing approval, whether as a single agent or in combination with other therapies, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors, and others in the medical community. For example, current approved immunotherapies, and other cancer treatments like chemotherapy and radiation therapy, are well established in the medical community, and doctors may continue to rely on these therapies. If the product candidates we develop do not achieve an adequate level of acceptance, we may not generate significant product revenues and we may not become profitable. The degree of market acceptance of any product candidate, if approved for commercial sale, will depend on a number of factors, including:

- · efficacy and potential advantages compared to alternative treatments;
- the ability to offer our products, if approved, for sale at competitive prices;
- · convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;

- · the strength of marketing and distribution support;
- the ability to obtain sufficient third-party coverage and adequate reimbursement, including with respect to the use of the approved product as a combination therapy;
- · adoption of a companion diagnostic and/or complementary diagnostic (if any); and
- · the prevalence and severity of any side effects.

The market opportunities for any current or future product candidate we develop, if and when approved, may be limited to those patients who are ineligible for established therapies or for whom prior therapies have failed, and may be small.

Cancer therapies are sometimes characterized as first-line, second-line, or third-line, and the FDA often approves new therapies initially only for third-line use. When cancer is detected early enough, first-line therapy, usually chemotherapy, hormone therapy, surgery, radiation therapy or a combination of these, is sometimes adequate to cure the cancer or prolong life without a cure. Second- and third-line therapies are administered to patients when prior therapy is not effective. We expect to initially seek approval of RMC-4630 and any other product candidates we develop as a therapy for patients who have received one or more prior treatments. Subsequently, for those products that prove to be sufficiently beneficial, if any, we would expect to seek approval potentially as a first-line therapy, but there is no guarantee that product candidates we develop, even if approved, would be approved for first-line therapy, and, prior to any such approvals, we may have to conduct additional clinical trials.

The number of patients who have the cancers we are targeting may turn out to be lower than expected. Additionally, the potentially addressable patient population for our current programs or future product candidates may be limited, if and when approved. Even if we obtain significant market share for any product candidate, if and when approved, if the potential target populations are small, we may never achieve profitability without obtaining marketing approval for additional indications, including to be used as first- or second-line therapy.

We are developing RMC-4630 in combination with Roche's cobimetinib, and may in the future, develop RMC-4630 and other product candidates in combination with other therapies, such as Amgen's AMG 510, which exposes us to additional risks.

We are developing RMC-4630 in combination with Roche's cobimetinib, and may in the future, develop RMC-4630 and other product candidates in combination with one or more currently approved cancer therapies, such as Amgen's AMG 510. Even if any product candidate we develop were to receive marketing approval or be commercialized for use in combination with other existing therapies, we would continue to be subject to the risks that the FDA or similar regulatory authorities outside of the United States could revoke approval of the therapy used in combination with our product candidate or that safety, efficacy, manufacturing or supply issues could arise with these existing therapies. Combination therapies are commonly used for the treatment of cancer, and we would be subject to similar risks if we develop any of our product candidates for use in combination with other drugs or for indications other than cancer. This could result in our own products being removed from the market or being less successful commercially.

We may also evaluate RMC-4630 or any other current or future product candidates in combination with one or more other cancer therapies that have not yet been approved for marketing by the FDA or similar regulatory authorities outside of the United States. We will not be able to market and sell RMC-4630 or any product candidate we develop in combination with any such unapproved cancer therapies that do not ultimately obtain marketing approval.

If the FDA or similar regulatory authorities outside of the United States do not approve these other drugs or revoke their approval of, or if safety, efficacy, manufacturing, or supply issues arise with, the drugs we choose to evaluate in combination with or any product candidate we develop, we may be unable to obtain approval of or market or any product candidate we develop.

In addition, Sanofi primarily controls the research and development activities of our SHP2 inhibitors, including RMC-4630, pursuant to the terms of the Sanofi Agreement, and may disagree with us regarding which other therapies should be evaluated in combination with RMC-4630. As a result of this disagreement, our completion of a trial in combination with our preferred combination product candidate may be delayed or prevented. We rely on Sanofi for the supply of RMC-4630 for future combination studies and if Sanofi is unwilling to supply RMC-4630 to be used in combination with a product candidate from our pipeline, our ability to complete a trial evaluating such combination may be delayed or prevented.

We face significant competition, and if our competitors develop and market products that are more effective, safer or less expensive than the product candidates we develop, our commercial opportunities will be negatively impacted.

The life sciences industry is highly competitive. We are currently developing therapies that will compete, if approved, with other products and therapies that currently exist or are being developed. Products we may develop in the future are also likely to face competition from other products and therapies, some of which we may not currently be aware. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, universities and other research institutions. Many of our competitors have significantly greater financial, manufacturing, marketing, product development, technical and human resources than we do. Large pharmaceutical companies, in particular, have extensive experience in clinical testing, obtaining marketing approvals, recruiting patients and manufacturing pharmaceutical products. These companies also have significantly greater research and marketing capabilities than we do and may also have products that have been approved or are in late stages of development, and collaborative arrangements in our target markets with leading companies and research institutions. Established pharmaceutical companies may also invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make the product candidates that we develop obsolete. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. As a result of all of these factors, our competitors may succeed in obtaining patent protection and/or marketing approval or discovering, developing and commercializing products in our field before we do.

There are a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. These treatments consist of small molecule drug products, biologics, cell-based therapies and traditional chemotherapy. There are also several programs in development targeting SHP2, including those clinical programs run by Novartis AG and Jacobio Pharmaceuticals Co. Ltd. There are several RAS pathway mutations programs, including those directed at KRAS<sup>G12C</sup>(OFF) and KRAS<sup>G12D</sup>(OFF) mutations, including clinical programs directed at KRAS<sup>G12C</sup>(OFF) being conducted by Amgen Inc., Mirati Therapeutics, Inc., Johnson & Johnson, AstraZeneca plc and Eli Lilly & Co. Other clinical programs directed at mutant RAS are being conducted by Merck & Co./Moderna Therapeutics, Boehringer Ingelheim and Gilead Sciences, Inc.

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 effects, are more convenient, have a broader label, are marketed more effectively, are reimbursed or are less expensive than any products that we may develop. Our competitors also may obtain FDA, EMA or other marketing approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong

market position before we are able to enter the market. Even if the product candidate we develop achieve marketing approval, they may be priced at a significant premium over competitive products if any have been approved by then, resulting in reduced competitiveness.

Smaller and other early stage companies may also prove to be significant competitors. In addition, academic research departments and public and private research institutions may be conducting research on compounds that could prove to be competitive. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. In addition, the biopharmaceutical industry is characterized by rapid technological change. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our product candidates obsolete, less competitive or not economical.

Even if we are able to commercialize any product candidates, such products may become subject to unfavorable pricing regulations or third-party coverage and reimbursement policies, which would harm our business.

The regulations that govern marketing approvals, pricing and reimbursement for new products vary widely from country to country. Some countries require approval of the sale price of a product before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product candidate in a particular country, but then be subject to price regulations that delay our commercial launch of the product candidate, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product candidate in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if our product candidates obtain marketing approval.

Our ability to commercialize any product candidates, whether as a single agent or combination therapy, successfully also will depend in part on the extent to which coverage and reimbursement for these product candidates and related treatments will be available from government authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. It is difficult to predict at this time what government authorities and third-party payors will decide with respect to coverage and reimbursement for our programs.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular products and requiring substitutions of generic products and/or biosimilars. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for drugs. We cannot be sure that coverage will be available for any product candidate that we commercialize and, if coverage is available, the level of reimbursement. These third-party payors are also examining the cost-effectiveness of drugs in addition to their safety and efficacy.

Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, as the process is time-consuming and costly, and coverage may be more limited than the purposes for which the drug is approved by the FDA or comparable foreign regulatory authorities. Additionally, no uniform policy requirement for coverage and reimbursement for drug products exists among third-party payors in the United States, which may result in coverage and reimbursement for drug products that can differ significantly from

payor to payor. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved drugs that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize drugs and our overall financial condition.

# We may fail to select or capitalize on the most scientifically, clinically and commercially promising or profitable mutant RAS(ON) target.

We have limited technical, managerial and financial resources to determine which of our lead generation stage RAS(ON) inhibitors should be advanced into further preclinical development, initial clinical trials, later-stage clinical development and potential commercialization. Initially, we are prioritizing four mutant RAS(ON) targets—KRAS<sup>G12C</sup>, KRAS<sup>G13C</sup>, KRAS<sup>G12D</sup> and NRAS<sup>G12C</sup>—and expect to nominate our first development candidate in 2020. In selecting a development candidate, we may make incorrect determinations. Our decisions to allocate our research and development, management and financial resources toward particular development candidates or therapeutic areas may not lead to the development of viable commercial products and may divert resources from better opportunities. Similarly, our decisions to delay or terminate development programs may also be incorrect and could cause us to miss valuable opportunities.

We may not be successful in our efforts to identify or discover other product candidates and may fail to capitalize on programs or product candidates that may present a greater commercial opportunity or for which there is a greater likelihood of success.

The success of our business depends upon our ability to identify, develop and commercialize product candidates. If we do not successfully develop and eventually commercialize products, we will face difficulty in obtaining product revenue in future periods, resulting in significant harm to our financial position and adversely affecting our share price. Research programs to identify new product candidates require substantial technical, financial and human resources, and we may fail to identify potential product candidates for numerous reasons.

Additionally, because we have limited resources beyond those provided by Sanofi on SHP2 and RMC-4630, we may forego or delay pursuit of opportunities with certain programs or product candidates or for indications that later prove to have greater commercial potential. For example, we currently intend to focus on the development of RMC-4630. However, the advancement of this product candidate may ultimately prove to be unsuccessful or less successful than another program in our pipeline that we might have chosen to pursue on a less aggressive basis. Our estimates regarding the potential market for our product candidates could be inaccurate, and our spending on current and future research and development programs may not yield any commercially viable products. If we do not accurately evaluate the commercial potential for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate. For example, we licensed worldwide development and commercialization rights with respect to RMC-4630 to Sanofi and will receive only milestone

payments, an equal share of profits and losses in the United States and royalties on annual net sales of each product outside the United States. Alternatively, we may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a partnering arrangement.

If any of these events occur, we may be forced to abandon or delay our development efforts with respect to a particular product candidate or fail to develop a potentially successful product candidate, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may need to use existing commercial diagnostic tests or develop, or enter into a collaboration or partnership to develop, novel complementary diagnostics and/or novel companion diagnostics for some of our current or future product candidates. If we or our future partners are unable to successfully develop such companion diagnostics or complementary diagnostics, or experience significant delays in doing so, we may not realize the full commercial potential of our future product candidates.

As one of the key elements of our product development strategy, we seek to identify cancer patient populations that may derive meaningful benefit from our current or future product candidates. Because predictive biomarkers may be used to identify the right patients for our programs and our current or future product candidates, we believe that our success may depend, in part, on our ability to use existing diagnostic tests (such as Foundation Medicine's FoundationOne® CDX), or develop novel complementary diagnostics and/or novel companion diagnostics in collaboration with partners.

In the event that novel tests will need to be developed, we have little experience in the development of diagnostics. As such, we expect to rely on future partners in developing appropriate diagnostics to pair with our current or future product candidates. We have not yet begun discussions with any potential partners with respect to the development of complementary diagnostics and/or companion diagnostics and may be unsuccessful in entering into collaborations for the development of companion diagnostics for our programs and our current or future product candidates.

Complementary diagnostics and/or companion diagnostics are subject to regulation by the FDA and similar regulatory authorities outside the United States as medical devices and require separate regulatory approval or clearance prior to commercialization. If we, our partners, or any third parties that we engage to assist us, are unable to successfully develop complementary diagnostics and/or companion diagnostics for our product candidates and any future product candidates, or experience delays in doing so:

- the development of our product candidates and any other future product candidates may be adversely affected if we are unable to appropriately select patients for enrollment in our clinical trials; and
- we may not realize the full commercial potential of our product candidates and any other future product candidates that receive marketing
  approval if, among other reasons, we are unable to appropriately identify, or it takes us longer to identify, patients who are likely to benefit
  from therapy with our products, if approved.

If any of these events were to occur, our business would be harmed, possibly materially.

We may seek and fail to obtain fast track or breakthrough therapy designations for our current or future product candidates. If we are successful, these programs may not lead to a faster development or regulatory review process, and they do not guarantee we will receive approval for any product candidate. We may also seek to obtain accelerated approval for one or more of our product candidates but the FDA may disagree that we have met the requirements for such approval.

If a product is intended for the treatment of a serious or life-threatening condition and preclinical or clinical data demonstrate the potential to address an unmet medical need for this condition, the product 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 product 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 rescind the fast track designation if it believes that the designation is no longer supported by data from our clinical development program.

We may also seek breakthrough therapy designation for any product candidate that we develop. 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 currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Like fast track designation, breakthrough therapy designation is within the discretion of the FDA. Accordingly, even if we believe a product candidate we develop 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 breakthrough therapy designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if a product candidate we develop qualifies as a breakthrough therapy, the FDA may later decide that the drug no longer meets the conditions for qualification and rescind the designation.

Drugs designated as fast track products or breakthrough therapies by the FDA are also eligible for accelerated approval if the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of accelerated approval, the FDA will generally require the sponsor to perform adequate and well-controlled post-marketing clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. In addition, the FDA requires preapproval of promotional materials for accelerated approval products, once approved. We cannot guarantee that the FDA will agree any of our product candidates has met the criteria to receive accelerated approval, which would require us to conduct additional clinical testing prior to seeking FDA approval. Even if any of our product candidates received approval through this pathway, the product may fail required post-approval confirmatory clinical trials, and we may be required to remove the product from the market or amend the product label in a way that adversely impacts its marketing.

We may seek Orphan Drug Designation for product candidates we develop, 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 any product candidates we develop, 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 greater than 200,000 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 grants Orphan Drug Designation after receiving the opinion of the EMA Committee for Orphan Medicinal Products on an Orphan Drug Designation application. Orphan Drug Designation is intended 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 a number of incentives, such as protocol assistance and scientific advice specifically for designated orphan medicines, and potential fee reductions depending on the status of the sponsor.

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 EMA or the FDA 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 such that market exclusivity is no longer justified.

Even if we obtain orphan drug exclusivity for a product candidate, that exclusivity may not effectively protect the product candidate from competition because different therapies can be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve the same 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. 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 applicable indications for our current and any future product 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.

# If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of any approved products.

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

· decreased demand for any approved product;

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

Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of products we develop, alone or with collaboration partners.

Insurance coverage is increasingly expensive. We may not be able to maintain insurance at a reasonable cost or in an amount adequate to satisfy any liability that may arise, if at all. Our insurance policy contains various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Even if our agreements with Sanofi or any future collaborator entitle us to indemnification against losses, such indemnification may not be available or adequate should any claim arise.

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

In the United States, 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 changes the way healthcare is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The ACA, among other things, 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% 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.

Some of the provisions of the ACA have yet to be fully implemented, while certain provisions have been subject to judicial and Congressional challenges, as well as efforts by the Trump administration to repeal or replace certain aspects of the ACA. Since January 2017, President Trump has signed two Executive Orders designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation,

two bills affecting the implementation of certain taxes under the ACA have been signed into law. The Tax Cuts and Jobs Act of 2017, or TCJA, includes a provision repealing, 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." Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 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. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the ACA, effective January 1, 2019, to reduce the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." On December 14, 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Cuts and Jobs Act of 2017. While the Texas U.S. District Court Judge, as well as the Trump administration and Centers for Medicare and Medicaid Services, or CMS, have stated that the ruling will have no immediate effect pending appeal of the decision, it is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the ACA will impact the ACA and our business. The effect that the ACA and its possible repeal and replacement may have on our business remains unclear.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. On August 2, 2011, the Budget Control Act of 2011, among other things, included aggregate reductions of Medicare payments to providers of 2% per fiscal year. These reductions went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2027 unless additional congressional action is taken. On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several types of providers.

Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. 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 any product candidate we develop or complementary diagnostics or companion diagnostics or additional pricing pressures.

Additionally, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed and enacted 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.

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.

## Risks related to reliance on third parties

We are dependent on our collaboration with Sanofi for the development of RMC-4630 and may depend on Sanofi for the development and commercialization of any other future SHP2 inhibitor product candidates. Under certain circumstances, Sanofi may unilaterally terminate the collaboration for convenience, which would materially and adversely affect our business.

In June 2018, we entered into a collaborative research, development and commercialization agreement with Sanofi, or the Sanofi Agreement, focused on researching, developing and commercializing SHP2 inhibitors as cancer therapies and potentially other indications. Sanofi primarily controls the research and development activities pursuant to the terms of the Sanofi Agreement, and our lack of control over such activities, including with respect to RMC-4630, could result in delays or other difficulties in the development and commercialization of product candidates, which may prevent completion of intended NDA filings in a timely fashion, if at all. Because of the allocation of responsibilities under the Sanofi Agreement, we are wholly dependent on Sanofi for the success of the RMC-4630 program. Any dispute with Sanofi may result in the delay or termination of the research, development or commercialization of RMC-4630 or other SHP2 inhibitor product candidates, and may result in costly litigation that diverts management attention and resources away from our day-to-day activities, which may adversely affect our business, financial condition, results of operation and prospects. For example, we plan to evaluate RMC-4630 in combination with other therapies (which may include product candidates from our pipeline), and Sanofi may disagree with us regarding which other therapies should be evaluated in combination with RMC-4630. As a result of this disagreement, our completion of a trial in combination with our preferred combination product candidate may be delayed or prevented. We rely on Sanofi for the supply of RMC-4630 for future combination studies and if Sanofi is unwilling to supply RMC-4630 to be used in combination with a product candidate from our pipeline, our ability to complete a trial evaluating such combination may be delayed or prevented.

In addition, Sanofi can terminate the Sanofi Agreement (including for convenience), and in the event Sanofi terminates the Sanofi Agreement, we would be prevented from receiving any research and development funding, milestone payments, profit share payments, royalty payments and other benefits under that agreement. Termination of the Sanofi Agreement could require us to seek additional funding in order to avoid delaying, reducing the scope of, or suspending, one or more of our research and development programs or clinical trials. In addition, any decision by Sanofi to terminate the Sanofi Agreement may negatively impact public perception of RMC-4630, or all of the SHP2 program covered by the Sanofi Agreement, which could adversely affect the market price of our common stock. We cannot provide any assurance with respect to the success of the Sanofi collaboration. Any of the foregoing events could have a materially adverse effect on our business, financial condition, results of operation and prospects. For more information regarding the Sanofi Agreement, see "Business—Collaboration agreement with Sanofi."

In addition to our collaboration with Sanofi, we may depend on collaborations with other third parties for the development and commercialization of our product candidates in the future. If our collaborations are not successful, we may not be able to capitalize on the market potential of these product candidates.

In the future, we may form or seek other strategic alliances, joint ventures, or collaborations, or enter into additional licensing arrangements with third parties that we believe will complement or augment our development and commercialization efforts with respect to product candidates we develop.

Collaborations involving our current and future product candidates, including our current collaborations with Sanofi, Roche and Amgen may pose the following risks to us:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial, abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- collaborators may not properly prosecute, maintain, enforce or defend our intellectual property rights or may use our proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation, or other intellectual property proceedings;
- collaborators may own or co-own intellectual property covering products that result from our collaboration with them, and in such cases, we may not have the exclusive right to develop, license or commercialize such intellectual property;
- · disputes may arise with respect to ownership of any intellectual property developed pursuant to our collaborations;
- disputes may arise between a collaborator and us that cause the delay or termination of the research, development or commercialization of
  the product candidate, or that result in costly litigation or arbitration that diverts management attention and resources; and
- if a present or future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program under such collaboration could be delayed, diminished or terminated.

As a result, if we enter into additional collaboration agreements and strategic partnerships or license our intellectual property, products or businesses, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations, which could delay our timelines or otherwise adversely affect our business. We also cannot be certain that, following a strategic transaction or license, we will achieve the revenue or specific net income that justifies such transaction. Any delays in entering into new collaborations or strategic partnership agreements related to any product candidate we develop could delay the development and commercialization of our product candidates, which would harm our business prospects, financial condition, and results of operations.

We may seek to establish additional collaborations, and, if we are not able to establish them on commercially reasonable terms, we may have to alter our development and commercialization plans.

The advancement of our product candidates and development programs and the potential commercialization of our current and future product candidates will require substantial additional cash to fund expenses. For some of our programs, we may decide to collaborate with additional pharmaceutical and biotechnology companies with respect to development and potential commercialization. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long term expenditures, issue securities that dilute our existing stockholders, or disrupt our management and business.

We face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Whether we reach a definitive agreement for other collaborations 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 progress of our clinical trials, the likelihood of approval by the FDA or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product 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 product 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 product candidate. Further, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for future product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view them as having the requisite potential to demonstrate safety and efficacy.

We may also be restricted under existing collaboration agreements from entering into future agreements on certain terms with potential collaborators. For example, under the Sanofi Agreement, we have granted worldwide exclusive rights under our intellectual property to Sanofi for SHP2 inhibitors, and during the term of the agreement we will be restricted from granting similar rights to other parties. This exclusivity could limit our ability to enter into collaborations with future collaborators.

In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators.

We may not be able to negotiate 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 product 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 product candidates or bring them to market and generate product revenue.

If conflicts arise between us and our collaborators or strategic partners, these parties may act in a manner adverse to us and could limit our ability to implement our strategies.

If conflicts arise between our corporate or academic collaborators or strategic partners and us, the other party may act in a manner adverse to us and could limit our ability to implement our strategies. Sanofi or future collaborators or strategic partners may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by the collaborators or strategic partners or to which the collaborators or strategic partners have rights, may result in the withdrawal of partner support for our product candidates. Our current or future collaborators or strategic partners may preclude us from entering into collaborations with their competitors, fail to obtain timely regulatory approvals, terminate their agreements with us prematurely, or fail to devote sufficient resources to the development and commercialization of products. Any of these developments could harm our product development efforts.

We rely on third parties to conduct our ongoing and planned clinical trials for RMC-4630 and any other product candidates we develop. If these third parties do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain marketing approval for or commercialize RMC-4630 and any other product candidates we develop and our business could be substantially harmed.

We do not have the ability to independently conduct clinical trials. We rely on medical institutions, clinical investigators, contract laboratories, and other third parties, including collaboration partners, to conduct or otherwise support clinical trials for RMC-4630 and other product candidates. We rely heavily on these parties for execution of clinical trials and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on CROs will not relieve us of our regulatory responsibilities. For any violations of laws and regulations during the conduct of our 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 and third parties are required to comply with regulations and requirements, including GCP, for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate, and that the trial patients are adequately informed of the potential risks of participating in clinical trials and their rights are protected. These regulations are enforced by the FDA, the Competent Authorities of the Member States of the EEA and comparable foreign regulatory authorities for any drugs in clinical development. The FDA enforces GCP requirements through periodic inspections of clinical trial sponsors, principal investigators and trial sites. If we or third parties fail to comply with applicable GCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, the FDA will determine that any of our future clinical trials will comply with GCP. In addition, our clinical trials must be conducted with product candidates produced under cGMP regulations. Our failure or the failure of third parties to comply with these regulations may require us to repeat clinical trials, which would delay the marketing approval process and could also subject us to enforcement action. We also are required to register certain ongoing clinical trials and provide certain information, including information relating to the trial's protocol, on a government-sponsored database, ClinicalTrials.gov, within specific timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Although we intend to design the clinical trials for our product candidates, or be involved in the design when other parties sponsor the trials, third parties conduct all of the clinical trials. For example, Amgen will conduct the planned Phase 1b trial evaluating the combination of RMC-4630 and AMG510. As a result, many important aspects of our clinical development, including their conduct and timing, will be outside of our direct control. Our reliance on third parties to conduct future clinical trials will also result in less direct control over the management of data developed through clinical trials than would be the case if we were relying entirely upon our own staff. Communicating with outside parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Outside parties may:

- · have staffing difficulties;
- · fail to comply with contractual obligations;
- · experience regulatory compliance issues;
- · undergo changes in priorities or become financially distressed; or
- · form relationships with other entities, some of which may be our competitors.

These factors may materially adversely affect the willingness or ability of third parties to conduct our clinical trials and may subject us to unexpected cost increases that are beyond our control. If the CROs do not perform

clinical trials in a satisfactory manner, breach their obligations to us or fail to comply with regulatory requirements, the development, marketing approval and commercialization of our product candidates may be delayed, we may not be able to obtain marketing approval and commercialize our product candidates, or our development program may be materially and irreversibly harmed. If we are unable to rely on clinical data collected by our CROs, we could be required to repeat, extend the duration of, or increase the size of any clinical trials we conduct and this could significantly delay commercialization and require significantly greater expenditures.

If any of our relationships with these third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs on commercially reasonable terms, or at all. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain are compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, any clinical trials such CROs are associated with may be extended, delayed or terminated, and we may not be able to obtain marketing approval for or successfully commercialize our product candidates. As a result, we believe that our financial results and the commercial prospects for our product candidates in the subject indication would be harmed, our costs could increase and our ability to generate revenue could be delayed.

We rely on third parties to manufacture preclinical and clinical drug supplies, and we intend to rely on third parties to produce commercial supplies of any approved product which increases the risk that we will not have sufficient quantities of such product candidates or products or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not own or operate manufacturing facilities for the production of preclinical, clinical or commercial supplies of the product candidates that we are developing or evaluating in our development programs. We have limited personnel with experience in drug manufacturing and lack the resources and the capabilities to manufacture any of our product candidates on a preclinical, clinical or commercial scale. We rely on third parties for supply of our preclinical and clinical drug supplies (including key starting and intermediate materials), and our strategy is to outsource all manufacturing of our product candidates and products to third parties, including Sanofi.

In order to conduct clinical trials of product candidates, we will need to have them manufactured in potentially large quantities. Our third-party manufacturers may be unable to successfully increase the manufacturing capacity for any of our clinical drug supplies (including key starting and intermediate materials) in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities and at any other time. For example, ongoing data on the stability of our product candidates may shorten the expiry of our product candidates and lead to clinical trial material supply shortages, and potentially clinical trial delays. If these third-party manufacturers are unable to successfully scale up the manufacture of our product candidates in sufficient quality and quantity, the development, testing and clinical trials of that product candidate may be delayed or infeasible, and regulatory approval or commercial launch of that product candidate may be delayed or not obtained, which could significantly harm our business.

Our use of new third-party manufacturers increases the risk of delays in production or insufficient supplies of our product candidates (and the key starting and intermediate materials for such product candidates) as we transfer our manufacturing technology to these manufacturers and as they gain experience manufacturing our product candidates (and the key starting and intermediate materials for such product candidates).

Even after a third-party manufacturer has gained significant experience in manufacturing our product candidates (or the key starting and intermediate materials for such product candidates) or even if we believe we have succeeded in optimizing the manufacturing process, there can be no assurance that such manufacturer

will produce sufficient quantities of our product candidates (or the key starting and intermediate materials for such product candidates) in a timely manner or continuously over time, or at all.

We may be delayed if we need to change the manufacturing process used by a third party. Further, if we change an approved manufacturing process, then we may be delayed if the FDA or a comparable foreign authority needs to review the new manufacturing process before it may be used.

We do not currently have any agreements with third-party manufacturers for long-term commercial supply. In the future, we may be unable to enter into agreements with third-party manufacturers for commercial supplies of any product candidate that we develop, or may be unable to do so on acceptable terms. Even if we are able to establish and maintain arrangements with third-party manufacturers, reliance on third-party manufacturers entails 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 non-renewal of the agreement by the third party at a time that is costly or inconvenient for us.

Third-party manufacturers may not be able to comply with cGMP requirements or similar regulatory requirements outside the United States. Our failure, or the failure of our third-party manufacturers, to comply with applicable requirements could result in sanctions being imposed on us, including fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and/or criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates.

Our future product candidates and any products that we may develop may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP requirements particularly for the development of monoclonal antibodies, and that might be capable of manufacturing for us.

If the third parties that we engage to supply any materials or manufacture product for our preclinical tests and clinical trials should cease to continue to do so for any reason, we likely would experience delays in advancing these tests and trials while we identify and qualify replacement suppliers or manufacturers and we may be unable to obtain replacement supplies on terms that are favorable to us. In addition, if we are not able to obtain adequate supplies of our product candidates or the substances used to manufacture them, it will be more difficult for us to develop our product candidates and compete effectively.

Our current and anticipated future dependence upon others for the manufacture of our product candidates (or the key starting and intermediate materials for such product candidates) may adversely affect our future profit margins and our ability to develop product candidates and commercialize any products that receive marketing approval on a timely and competitive basis.

Our future relationships with customers and third-party payors in the United States and elsewhere may be subject, directly or indirectly, to applicable anti-kickback, fraud and abuse, false claims, transparency, health information privacy and security and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product 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, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, or FCA, which may constrain the business or financial arrangements and relationships through which we sell, market and distribute any products for which we obtain marketing approval. In addition, we may be subject to transparency laws and patient privacy regulation by the U.S. federal and state governments and by governments in foreign jurisdictions in which we conduct our business. The applicable federal, state and foreign healthcare laws and regulations that may affect our ability to operate include:

- the federal Anti-Kickback Statute, which prohibits, among other things, knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under the Medicare and Medicaid programs or other federal healthcare programs. A person or entity can be found guilty of violating the statute without actual knowledge of the statute or specific intent to violate it. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers, and formulary managers on the other. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution;
- the federal civil and criminal false claims laws and civil monetary penalty laws, including the FCA, which prohibit any person or entity from, among other things, knowingly presenting, or causing to be presented, a false, fictitious or fraudulent claim for payment to, or approval by, the federal government or knowingly making, using or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating HIPAA without actual knowledge of the statutes or specific intent to violate them;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective
  implementing regulations, which impose, among other things, specified requirements relating to the privacy, security and transmission of
  individually identifiable health information held by covered entities and their business associates. HITECH also created new tiers of civil
  monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state
  attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek
  attorneys' fees and costs associated with pursuing federal civil actions;
- the Physician Payments Sunshine Act, created under the ACA, and its implementing regulations, which requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report

annually to CMS information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;

- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers;
- analogous state laws and regulations, such as state anti-kickback and false claims laws, which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and healthcare and data protection laws in the European Union and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers and laws governing the privacy and security of certain protected information, such as the General Data Protection Regulation, or GDPR, which imposes obligations and restrictions on the collection and use of personal data relating to individuals located in the European Economic Area, or the EEA, and the United Kingdom (including health data).

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available under such laws, it is possible that some of our business activities could be subject to challenge under one or more of such laws. The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. Ensuring that our business arrangements with third parties comply with applicable healthcare laws, as well as responding to investigations by government authorities, can be time- and resource-consuming and can divert management's attention from the business.

If our operations are found to be in violation of any of the laws described above or any other government regulations that apply to us, we may be subject to penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, individual imprisonment, possible exclusion from participation in federal and state funded healthcare programs, contractual damages and the curtailment or restricting of our operations, as well as additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, any of which could harm our ability to operate our business and our financial results. Further, if the physicians or other providers or entities with whom we expect to do business are 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. In addition, the approval and commercialization of any product candidate we develop outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

## Risks related to intellectual property

If we and our collaborators are unable to obtain and maintain sufficient patent and other intellectual property protection for our product candidates and technology, our competitors could develop and commercialize products and technology similar or identical to ours, and we may not be able to compete effectively in our market or successfully commercialize any product candidates we may develop.

Our success depends in significant part on our ability and the ability of our collaborators to obtain, maintain, enforce and defend patents and other intellectual property rights with respect to our product candidates and technology and to operate our business without infringing, misappropriating, or otherwise violating the intellectual property rights of others. If we and our collaborators are unable to obtain and maintain sufficient intellectual property protection for RMC-4630 or other product candidates that we may identify, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors and other third parties could develop and commercialize product candidates similar or identical to ours, and our ability (and the ability of our collaborators) to successfully commercialize RMC-4630 and other product candidates that we (and our collaborators) may pursue may be impaired. We do not have any issued patents with respect to our SHP2 program, including RMC-4630, and 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. Failure to obtain such issued patents could have a material adverse effect on our and Sanofi's ability to develop and commercialize SHP2 inhibitor products, including RMC-4630, and on our ability to receive milestone, royalty or other payments from Sanofi pursuant to the Sanofi Agreement.

We seek to protect our proprietary positions by, among other things, filing patent applications in the United States and abroad related to RMC-4630 or other product candidates that we may identify. Obtaining, maintaining, defending and enforcing pharmaceutical patents is costly, time consuming and complex, and we may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may not have the right to control the preparation, filing, prosecution and maintenance of patent applications, or to maintain the rights to patents licensed to or from third parties.

Although we enter into confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, collaborators, CROs, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach the agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. Further, we may not be aware of all third-party intellectual property rights potentially relating to our product candidates. Publications of discoveries in the 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 were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions.

The patent position of pharmaceutical companies generally is highly uncertain, involves complex legal, technological and factual questions and has, in recent years, been the subject of much debate and litigation throughout the world. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, or vice versa. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. The subject matter claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Therefore, our pending and future patent applications may not result in patents being issued in relevant jurisdictions that protect our product candidates, in whole or in part, or which effectively prevent others from

commercializing competitive product candidates, and even if our patent applications issue as patents in relevant jurisdictions, they may not issue in a form that will provide us with any meaningful protection for our product candidates or technology, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Additionally, our competitors may be able to circumvent our patents by developing similar or alternative product candidates or technologies in a non-infringing manner.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. We may be subject to a third-party preissuance submission of prior art to the United States Patent and Trademark Office, or the USPTO, or become involved in opposition, derivation, revocation, reexamination, *inter partes* review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others, or other proceedings in the USPTO or applicable foreign offices that challenge priority of invention or other features of patentability. An adverse determination in any such submission, proceeding or litigation could result in loss of exclusivity or freedom to operate, patent claims being narrowed, invalidated or held unenforceable, in whole or in part, limit the scope or duration of the patent protection of our product candidates, all of which could limit our ability to stop others from using or commercializing similar or identical product candidates or technology to compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates, or could have a material adverse effect on our ability to raise funds necessary to continue our research programs or clinical trials. Such proceedings also may result in substantial cost and require significant time from our scientists and management, even if the eventual outcome is favorable to us.

In addition, given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products or technology similar or identical to ours for a meaningful amount of time, or at all. Moreover, some of our owned or licensed patents and patent applications are, and may in the future be, co-owned with third parties. If we are unable to obtain exclusive licenses to any such co-owners' interest in such patents or patent applications, such co-owners may be able to license their rights to other third parties, including our competitors, and our competitors could market competing products and technology. In addition, we may need the cooperation of any such co-owners in order to enforce such patents against third parties, and such cooperation may not be provided to us. Any of the foregoing could harm our competitive position, business, financial condition, results of operations and prospects.

We have entered into licensing agreements with third parties. If we fail to comply with our obligations in the agreements under which we license intellectual property rights to or from third parties, or these agreements are terminated, or we otherwise experience disruptions to our business relationships with our licensors or licensees, our competitive position, business, financial condition, results of operations and prospects could be harmed.

In addition to patent and other intellectual property rights we own or co-own, we have licensed, and may in the future license, patent and other intellectual property rights to and from other parties. Licenses may not provide us with exclusive rights to use the applicable intellectual property and technology in all relevant fields of use and in all territories in which we may wish to develop or commercialize our products and technology in the future. As a result, we may not be able to prevent competitors from developing and commercializing competitive products or technologies.

In addition, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications or to maintain, defend and enforce the patents that we license to or from third parties, and we may have to rely on our partners to fulfill these responsibilities. For example, in June 2018, we entered into the Sanofi Agreement, wherein we exclusively licensed the worldwide rights in our SHP2 inhibitor program, including RMC-4630, to Sanofi. Although we have review and comment rights regarding patent prosecution decisions, Sanofi retains ultimate decision-making control, as well as the sole and exclusive right to enforce infringement of or defend claims against patents that relate to SHP2 inhibitor products licensed to it pursuant to the Sanofi Agreement. Consequently, any such licensed patents and applications may not be prepared, filed, prosecuted, maintained, enforced, and defended in a manner consistent with the best interests of our business. If our current or future licensors, licensees or collaborators fail to prepare, file, prosecute, maintain, enforce, and defend licensed patents and other intellectual property rights, such rights may be reduced or eliminated, and our right to develop and commercialize any of our product candidates or technology that are the subject of such licensed rights could be adversely affected. In addition, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties, the licensor may have the right to terminate the license. If these agreements are terminated, the underlying patents fail to provide the intended exclusivity or we otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business or be prevented from developing and commercializing our product candidates, and competitors could have the freedom to seek regulatory approval of, and to market, products identical to ours. Termination of these agreements or reduction or elimination of our rights under these agreements may also result in our having to negotiate new or reinstated agreements with less favorable terms, cause us to lose our rights under these agreements, including our rights to important intellectual property or technology, or impede, delay or prohibit the further development or commercialization of one or more product candidates that rely on such agreements. It is possible that we may be unable to obtain any additional licenses at a reasonable cost or on reasonable terms, if at all. In that event, we may be required to expend significant time and resources to redesign our product candidates or the methods for manufacturing them or to develop or license replacement technology, all of which may not be feasible on a technical or commercial basis.

In addition, the research resulting in certain of our owned and in-licensed patent rights and technology was funded in part by the U.S. federal or state governments. As a result, the government may have certain rights, including march-in rights, to such patent rights and technology. When new technologies are developed with government funding, the government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention for noncommercial purposes. These rights may permit the government to disclose our confidential information to third parties or allow third parties to use our licensed technology. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Any of the foregoing could harm our competitive position, business, financial condition, results of operations and prospects.

Licensing of intellectual property is of critical importance to our business and involves complex legal, business and scientific issues and certain provisions in intellectual property license agreements may be susceptible to multiple interpretations. Disputes may arise between us and our licensing partners regarding intellectual property subject to a license agreement, including:

• the scope of rights granted under the license agreement and other interpretation-related issues;

- whether and the extent to which technology and processes of one party infringe on intellectual property of the other party that are not subject to the licensing agreement;
- rights to sublicense patent and other rights to third parties;
- any diligence obligations with respect to the use of the licensed technology in relation to development and commercialization of our product candidates, and what activities satisfy those diligence obligations;
- · the ownership of inventions and know-how resulting from the joint creation or use of intellectual property;
- · rights to transfer or assign the license; and
- · the effects of termination.

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 harm 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 current licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

In addition, if our licensors fail to abide by the terms of the license, if the licensors fail to prevent infringement by third parties or if the licensed patents or other rights are found to be invalid or unenforceable, our business, competitive position, financial condition, results of operations and prospects could be materially harmed. For more information regarding our license agreements, see "Business—Collaboration agreement with Sanofi." Any of the foregoing could harm our competitive position, business, financial condition, results of operations and prospects.

#### If we are unable to obtain licenses from third parties on commercially reasonable terms or at all, our business could be harmed.

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. The licensing of third-party intellectual property rights is a competitive area, and more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. More established companies may have a competitive advantage over us due to their size, capital resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to license such technology, or if we are forced to license such technology on unfavorable terms, our business could be materially harmed. If we are unable to obtain a necessary license, we may be unable to develop or commercialize the affected product candidates, which could materially harm our business, and the third parties owning such intellectual property rights could seek either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties or other forms of compensation. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. Any of the foregoing could harm our competitive position, business, financial condition, results of operations and prospects.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might subject us to infringement claims or adversely affect our ability to develop and market our product candidates.

We cannot guarantee that any of our or our licensors' patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending patent application in the United States and abroad that is relevant to or necessary for the commercialization of our product candidates in any jurisdiction. For example, U.S. patent applications filed before November 29, 2000 and certain U.S. patent applications filed after that date that will not be filed outside the United States remain confidential until patents issue. As mentioned above, patent applications in the United States and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our product candidates could have been filed by third parties without our knowledge. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our product candidates or the use of our product candidates. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our product candidates. We may incorrectly determine that our product candidates are not covered by a third-party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our product candidates.

If we fail to identify and correctly interpret relevant patents, we may be subject to infringement claims. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we fail in any such dispute, in addition to being forced to pay damages, which may be significant, we may be temporarily or permanently prohibited from commercializing any of our product candidates that are held to be infringing. We might, if possible, also be forced to redesign product candidates so that we no longer infringe the third-party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business and could adversely affect our business, financial condition, results of operations and prospects.

## Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired for a product candidate, we may be open to competition from competitive medications, including generic medications. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing product candidates similar or identical to ours for a meaningful amount of time, or at all

Depending upon the timing, duration and conditions of any FDA marketing approval of our product candidates, one or more of our owned or licensed U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, referred to as the Hatch-Waxman

Amendments, and similar legislation in the European Union and certain other countries. The Hatch-Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. However, we may not receive an extension if we fail to exercise due diligence during the testing phase or regulatory review process, fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. Only one patent per approved product can be extended, the extension cannot extend the total patent term beyond 14 years from approval and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for the applicable product candidate will be shortened and our competitors may obtain approval to market competing products sooner. As a result, our revenue from applicable products could be reduced. Further, if this occurs, our competitors may take advantage of our investment in development and trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case, and our competitive position, business, financial condition, results of operations and prospects could be materially harmed.

Also, there are detailed rules and requirements regarding the patents that may be submitted to the FDA for listing in the Approved Drug Products with Therapeutic Equivalence Evaluations, or the Orange Book. We may be unable to obtain patents covering our product candidates that contain one or more claims that satisfy the requirements for listing in the Orange Book. Even if we submit a patent for listing in the Orange Book, the FDA may decline to list the patent, or a manufacturer of generic drugs may challenge the listing. If one of our product candidates is approved and a patent covering that product candidate is not listed in the Orange Book, a manufacturer of generic drugs would not have to provide advance notice to us of any abbreviated new drug application filed with the FDA to obtain permission to sell a generic version of such product candidate. Any of the foregoing could harm our competitive position, business, financial condition, results of operations and prospects.

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

Filing, prosecuting, maintaining, defending and enforcing patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may export otherwise infringing products to territories where we have patent protection, but enforcement rights are not as strong as those in the United States. These products may compete with our product candidates and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of some countries do not favor the enforcement or protection of patents, trade secrets and other intellectual property, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our intellectual property and proprietary rights generally. Proceedings to enforce our intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not

issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful.

Many foreign countries, including some European Union countries, India, Japan and China, have compulsory licensing laws under which a patent owner may be compelled under specified circumstances to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In those countries, we may have limited remedies if patents are infringed or if we are compelled to grant a license to a third party, which could materially diminish the value of the applicable patents. This could limit our potential revenue opportunities. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license, which could adversely affect our business, financial condition, results of operations and prospects.

# Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

Obtaining and enforcing patents in the pharmaceutical industry is inherently uncertain, due in part to ongoing changes in the patent laws. For example, in the United States, depending on decisions by Congress, the federal courts, and the USPTO, the laws and regulations governing patents, and interpretation thereof, could change in unpredictable ways that could weaken our and our licensors' or collaborators' ability to obtain new patents or to enforce existing or future patents. For example, 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. Therefore, there is increased uncertainty with regard to our and our licensors' or collaborators' ability to obtain patents in the future, as well as uncertainty with respect to the value of patents once obtained.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our and our licensors' or collaborators' patent applications and the enforcement or defense of our or our licensors' or collaborators' issued patents. For example, assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith America Invents Act, or the Leahy-Smith Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. The Leahy-Smith Act also includes a number of significant changes that affect the way patent applications are prosecuted and may also affect patent litigation. These include allowing third-party submission of prior art to the USPTO during patent prosecution and additional procedures to challenge the validity of a patent by USPTO-administered post-grant proceedings, including post-grant review, inter partes review and derivation proceedings. The USPTO recently developed new regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, particularly the first inventor-to-file provisions. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our or our licensors' patent applications and the enforcement or defense of our or our licensors' issued patents. Similarly, statutory or judicial changes to the patent laws of other countries may increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. All of the foregoing could harm our business, financial condition, results of operations and prospects.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated if we fail to comply with these requirements.

Periodic maintenance fees, renewal fees, annuity fees, and various other fees are required to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of a patent. In certain circumstances, we rely on our licensors and collaborators to pay these fees. The USPTO and various foreign patent agencies also require compliance with a number of procedural, documentary, fee payment and other similar requirements during the patent application and prosecution process. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official communications within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. While an inadvertent lapse can in some 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 irrevocable abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If we or our licensors or collaborators fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market with similar or identical products or technology, which would harm our business, financial condition, results of operations and prospects.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time-consuming and unsuccessful, and issued patents covering our technology and product candidates could be found invalid or unenforceable if challenged.

Competitors and other third parties may infringe or otherwise violate our issued patents or other intellectual property or the patents or other intellectual property of our licensors. In addition, our patents or the patents of our licensors may become involved in inventorship or priority disputes. Our pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. To counter infringement or other unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. Our ability to enforce patent rights also depends on our ability to detect infringement. It may be difficult to detect infringers who do not advertise the components or methods that are used in connection with their products and services. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's product or service. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents or that our patents are invalid or unenforceable. In a patent infringement proceeding, a court may decide that a patent of ours is invalid or unenforceable, in whole or in part, construe the patent's claims narrowly or refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology. An adverse result in any litigation proceeding could put one or more of our owned or licensed patents at risk of being invalidated, held unenforceable or interpreted narrowly. We may find it impractical or undesirable to enforce our intellectual property against some third parties.

If we were to initiate legal proceedings against a third party to enforce a patent directed to our product candidates, or one of our future product candidates, the defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement or insufficient written description. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO or made a misleading statement during prosecution. Third parties may also raise similar claims before the USPTO or an equivalent foreign body, even outside the context of litigation. Potential proceedings include re-examination, post-grant review, inter

partes review, interference proceedings, derivation proceedings and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in the revocation of, cancellation of, or amendment to our patents in such a way that they no longer cover our technology or any product candidates that we may develop. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on the applicable product candidates or technology covered by the patent rendered invalid or unenforceable. Such a loss of patent protection would materially harm our business, financial condition, results of operations and prospects.

Interference proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be materially harmed if the prevailing party does not offer us a license on commercially reasonable terms.

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.

Some of our competitors are larger than we are and have substantially greater resources. They are, therefore, likely to be able to sustain the costs of complex patent 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, misappropriating or otherwise violating our intellectual property. Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims could result in substantial costs and diversion of management resources, which could harm our business. In addition, the uncertainties associated with litigation could compromise our ability to raise the funds necessary to continue our clinical trials, continue our internal research programs, or in-license needed technology or other product candidates. There could also be public announcements of the results of the hearing, motions, or other interim proceedings or developments. If securities analysts or investors perceive those results to be negative, it could cause the price of shares of our common stock to decline. Any of the foregoing events could harm our business, financial condition, results of operation and prospects.

Third parties may initiate legal proceedings alleging that we are infringing, misappropriating or otherwise violating their intellectual property rights, the outcome of which would be uncertain and could negatively impact the success of our business.

Our commercial success depends upon our ability to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing, misappropriating or otherwise violating the intellectual property and other proprietary rights of third parties. There is considerable intellectual property litigation in the pharmaceutical industry. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our product candidates and their manufacture and our other technology, including re-examination, interference, post-grant review, inter partes review or derivation proceedings before the USPTO or an equivalent foreign body. Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the fields in which we are developing our product candidates. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of their merit.

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 commercialize any product candidates we may develop and any other product candidates or technologies covered by the asserted third-party patents. 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, misappropriate or otherwise violate a third party's intellectual property rights, and we are unsuccessful in demonstrating that such rights are invalid or unenforceable, we could be required to obtain a license from such a third party in order to continue developing and marketing our products and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties and other fees, redesign our infringing product candidate or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business. Any of the foregoing events would harm our business. financial condition, results of operations and prospects.

We may be subject to claims by third parties asserting that we or our employees have infringed upon, misappropriated or otherwise violated their intellectual property rights, or claiming ownership of what we regard as our own intellectual property.

Many of our employees were previously employed at other biotechnology or pharmaceutical companies. Although we try to ensure that our employees, consultants and advisors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these individuals have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's former employer. We may also be subject to claims that patents and applications we have filed to protect inventions of our employees, consultants and advisors, even those related to one or more of our product candidates, are rightfully owned by their former or concurrent employer. Litigation may be necessary to defend against these claims.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs, delay development of our product candidates and be a distraction to management. Any of the foregoing events would harm our business, financial condition, results of operations and prospects.

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

We or our licensors may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets, or other intellectual property as an inventor or co-inventor. For example, we or our licensors may have inventorship disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our product candidates. While it is our policy to require our employees and contractors who may be involved in the 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 develops intellectual property that we regard as our own. Our and their assignment agreements may not be self-executing or may be breached, and litigation may be necessary to defend against these and other claims challenging inventorship or our or our licensors' ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our product candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

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

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. 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 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 conduct such litigation or proceedings adequately. As noted above, 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. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace, including compromising our ability to raise the funds necessary to continue our clinical trials, continue our research programs, license necessary technology from third parties, or enter into development collaborations that would help us commercialize our product candidates, if approved. Any of the foregoing events would harm our business, financial condition, results of operations and prospects.

## If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

We rely on trade secrets and confidentiality agreements to protect our unpatented know-how, technology and other proprietary information (including unpatented know-how associated with Warp Drive) and to maintain our competitive position. Trade secrets and know-how can be difficult to protect. We seek to protect these trade secrets and other proprietary technology, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, collaborators, CROs, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. We cannot guarantee that we have entered into such agreements with each party that may have or has had access to our trade secrets or proprietary technology and processes. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our products that we consider proprietary. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary information will be effective.

We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. Enforcing a claim that a

party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. 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 from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third party, our competitive position would be materially and adversely harmed.

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 tradenames 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, 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.

#### 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 any product candidates we may develop or utilize similar technology but that are not covered by the claims of the patents that we license or may own in the future;
- we, or our current or future licensors might not have been the first to make the inventions covered by the issued patent or pending patent
  application that we license or may own in the future;
- · we, or our current or future licensors 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 pending owned or licensed patent applications or those that we may own or license in the future 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;

- our competitors 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 harm our business, financial condition, results of operations and prospects.

### Risks related to employee matters, managing our growth and other risks related to our business

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

We are highly dependent on members of our executive team. The loss of the services of any of them may adversely impact the achievement of our objectives. Any of our executive officers could leave our employment at any time, as all of our employees are "at-will" employees. We currently do not have "key person" insurance on any of our employees. The loss of the services of one or more of our key personnel might impede the achievement of our research, development and commercialization objectives.

Recruiting and retaining qualified employees, consultants and advisors for our business, including scientific and technical personnel, also will be critical to our success. Competition for skilled personnel is intense and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies and academic institutions for skilled individuals. In addition, failure to succeed in preclinical studies, clinical trials or applications for marketing approval may make it more challenging to recruit and retain qualified personnel. The inability to recruit, or the loss of services of certain executives, key employees, consultants or advisors, may impede the progress of our research, development and commercialization objectives and have a material adverse effect on our business, financial condition, results of operations and prospects.

We currently have no sales organization. If we are unable to establish sales capabilities on our own or through third parties, we may not be able to market and sell any products effectively, if approved, or generate product revenue.

We currently do not have a marketing or sales organization. In order to commercialize any product, if approved, in the United States and foreign jurisdictions, we must build our marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. In advance of any of our product candidates receiving regulatory approval, we expect to establish a sales organization with technical expertise and supporting distribution capabilities to commercialize each such product candidate, which will be expensive and time-consuming. We have no prior experience in the marketing, sale and distribution of pharmaceutical products, and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain, and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the

commercialization of these products. We may choose to collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. If we are unable to enter into such arrangements on acceptable terms or at all, we may not be able to successfully commercialize our product candidates. If we are not successful in commercializing products, either on our own or through arrangements with one or more third parties, we may not be able to generate any future product revenue and we would incur significant additional losses.

### We will need to grow the size of our organization, and we may experience difficulties in managing this growth.

As of September 30, 2019, we had 90 full-time employees, including 74 employees engaged in research and development. As our development and commercialization plans and strategies develop, and as we transition into operating as a public company, we expect to need additional managerial, operational, sales, marketing, financial and other personnel. Future growth would impose significant added responsibilities on members of management, including:

- · identifying, recruiting, integrating, maintaining and motivating additional employees;
- managing our internal development efforts effectively, including the clinical and FDA review process for RMC-4630 and any other product candidate we develop, while complying with our contractual obligations to contractors and other third parties; and
- improving our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to advance development of and, if approved, commercialize RMC-4630 and any other product candidate we develop will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services, including substantially all aspects of marketing approval, clinical management, and manufacturing. We cannot assure you that the services of independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by consultants is compromised for any reason, our clinical trials may be extended, delayed or terminated, and we may not be able to obtain marketing approval of any current or future product candidates or otherwise advance our business. We cannot assure you that we will be able to manage our existing consultants or find other competent outside contractors and consultants on economically reasonable terms, or at all.

If we are not able to effectively expand our organization by hiring new employees and expanding our groups of consultants and contractors, we may not be able to successfully implement the tasks necessary to further develop and commercialize RMC-4630 and any future product candidates we develop and, accordingly, may not achieve our research, development and commercialization goals.

We have in the past engaged and may in the future engage in strategic transactions; such transactions could affect our liquidity, dilute our existing stockholders, increase our expenses and present significant challenges in focus and energy to our management or prove not to be successful.

From time to time, we may consider strategic transactions, such as acquisitions of companies, asset purchases and out-licensing or in-licensing of intellectual property, products or technologies. For example, in October

2018, we acquired all of the outstanding shares of Warp Drive Bio, which became our direct wholly-owned subsidiary. See "Business—Acquisition of Warp Drive."

Additional potential transactions that we may consider in the future include a variety of business arrangements, including spin-offs, strategic partnerships, joint ventures, restructurings, divestitures, business combinations and investments. Any future transactions could result in potentially dilutive issuances of our equity securities, including our common stock, or the incurrence of debt, contingent liabilities, amortization expenses or acquired in-process research and development expenses, any of which could affect our financial condition, liquidity and results of operations. Future acquisitions may also require us to obtain additional financing, which may not be available on favorable terms or at all. These transactions may never be successful and may require significant time and attention of management. In addition, the integration of any business that we may acquire in the future may disrupt our existing business and may be a complex, risky and costly endeavor for which we may never realize the full benefits of the acquisition.

If we fail to comply with environmental, health and safety 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 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.

We or the third parties upon whom we depend may be adversely affected by earthquakes or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our corporate headquarters and other facilities are located in the San Francisco Bay Area, which in the past has experienced both severe earthquakes and wildfires. We do not carry earthquake insurance. Earthquakes, wildfires or other natural disasters could severely disrupt our operations, and have a material adverse effect on our business, results of operations, financial condition and prospects.

If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as our enterprise financial systems or manufacturing resource planning and enterprise quality systems, 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 currently are limited and are unlikely to prove adequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which, particularly when taken together with our lack of earthquake insurance, could have a material adverse effect on our business.

Furthermore, integral parties in our supply chain are similarly vulnerable to natural disasters or other sudden, unforeseen and severe adverse events. If such an event were to affect our supply chain, it could have a material adverse effect on our business.

Our internal computer systems, or those used by our CROs or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, our internal computer systems and those of our future CROs and other contractors and consultants are vulnerable to damage from computer viruses and unauthorized access. While we have not to our knowledge experienced any such material system failure or security breach to date, 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. For example, the loss of clinical trial data from completed or future clinical trials could result in delays in our marketing approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on third parties for the manufacture of our product candidates and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our future product candidates could be delayed.

Our employees, independent contractors, vendors, principal investigators, CROs and consultants may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk that our employees, independent contractors, vendors, principal investigators, CROs and consultants may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violate the regulations of the FDA and comparable foreign regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities; healthcare fraud and abuse laws and regulations in the United States and abroad; or laws that require the reporting of financial information or data accurately. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Activities subject to these laws also involve the improper use of information obtained in the course of clinical trials or creating fraudulent data in our preclinical studies or clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, 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 comply with these laws or regulations. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. 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 related to our common stock and this offering

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

The initial public offering price of our common stock will be substantially higher than the pro forma as adjusted net tangible book value per share of our common stock. Therefore, if you purchase our common stock in this offering, you will pay a price per share that substantially exceeds the pro forma as adjusted net tangible book value per share after the completion of this offering. Based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, you will experience immediate dilution of \$ per share, representing the difference between our pro forma as adjusted net tangible book value per share and the assumed initial public offering price. In addition, investors purchasing common stock in this offering will contribute % of the total amount invested by stockholders since inception, but will own only % of our common stock outstanding after this offering. In the past, we issued options and other securities to acquire common stock at prices significantly below the initial public offering price. To the extent these outstanding securities are ultimately exercised, investors purchasing common stock in this offering will incur further dilution. See "Dilution" for a more detailed description of the dilution to new investors in the offering.

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

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

- · the success of competitive products or technologies;
- · results of clinical trials and preclinical studies 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 our product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license product candidates or companion diagnostics;
- 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; and
- · general economic, industry and market conditions.

## An active trading market for our common stock may not develop, and you may not be able to resell your shares at or above the initial public offering price.

Prior to this offering, there has been no public market for shares of our common stock and an active trading market for our shares may never develop or be sustained following this offering. The initial public offering price of our common stock will be determined through negotiations between us and the underwriters. This initial public offering price may not be indicative of the market price of our common stock after this offering. In the absence of an active trading market for our common stock, investors may not be able to sell their common stock at or above the initial public offering price or at the time that they would like to sell.

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

We do not currently intend to pay any cash dividends on our common stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future. Since we do not intend to pay dividends, your ability to receive a return on your investment will depend on any future appreciation in the market value of our common stock. There is no guarantee that our common stock will appreciate or even maintain the price at which our holders have purchased it.

# We are an emerging growth company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements, that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements and exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years following the year in which we complete this offering, although circumstances could cause us to lose that status earlier. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least \$1.07 billion or (c) in which we are deemed to be a large accelerated filer, which requires the market value of our common stock that is held by non-affiliates to exceed \$700.0 million as of the prior June 30th, and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to use the extended transition period for any other 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. 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.

Our executive officers, directors and their affiliates will continue to exercise significant influence over our company after this offering, which will limit your ability to influence corporate matters and could delay or prevent a change in corporate control.

Immediately following the completion of this offering, our executive officers, directors and their affiliates will beneficially own, in the aggregate, approximately % of our outstanding common stock, assuming the sale by us of shares of common stock in this offering, based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus. As a result, these stockholders, if they act together, will be able to influence our management and affairs and the outcome of matters submitted to our stockholders for approval, including the election of directors and any sale, merger, consolidation or sale of all or substantially all of our assets. These stockholders acquired their shares of common stock for substantially less than the price of the shares of common stock being acquired in this offering, and these stockholders may have interests, with respect to their common stock, that are different from those of investors in this offering, and the concentration of voting power among these stockholders may have an adverse effect on the price of our common stock. In addition, this concentration of ownership might adversely affect the market price of our common stock by:

- · delaying, deferring or preventing a change of control of us;
- · impeding a merger, consolidation, takeover or other business combination involving us; or
- · discouraging a potential acquirer from making a tender offer or otherwise attempting to obtain control of us.

See "Principal stockholders" in this prospectus for more information regarding the ownership of our outstanding common stock by our executive officers, directors and their affiliates.

We have broad discretion in how we use the proceeds of this 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 this offering. As a result, investors will be relying upon management's judgment with only limited information about our specific intentions for the use of the net proceeds from this offering. We may use the net proceeds from this 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 this offering in a manner that does not produce income or that loses value.

We will incur significantly 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, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, which will require, among other things, that we file with the U.S. Securities and Exchange Commission, or the SEC, annual, quarterly and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and Nasdaq to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation-related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as "say on pay" and proxy access. Recent legislation permits emerging growth companies to implement many of these requirements over a longer period and up to five years from the

pricing of this offering. We intend to take advantage of this new legislation, but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition, results of operations and prospects. The increased costs will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business or increase the prices of our products or services. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the same or similar coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

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

If our existing stockholders sell, or indicate an intention to sell, substantial amounts of our common stock in the public market after the lock-up and other legal restrictions on resale discussed in this prospectus lapse, the market price of our common stock could decline. Based upon the number of shares of common stock, on an as-converted basis, outstanding as of September 30, 2019, upon the completion of this offering, we will have outstanding a total of shares of common stock, assuming no exercise of the underwriters' option to purchase an additional shares. Of these shares, as of the date of this prospectus, approximately shares of our common stock, or % of shares of our common stock, plus any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable, without restriction, in the public market immediately following this offering, assuming that current stockholders do not purchase shares in this offering.

The lock-up agreements pertaining to this offering will expire 180 days from the date of this prospectus, subject to earlier release of all or a portion of the shares subject to such agreements by J.P. Morgan Securities LLC in its sole discretion. After the lock-up agreements expire, based upon the number of shares of common stock, on an as-converted basis, outstanding as of September 30, 2019, up to an additional shares of common stock will be eligible for sale in the public market. Approximately % of these additional 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.

Upon completion of this offering, shares of common stock that are either subject to outstanding options or reserved for future issuance under our equity incentive 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 common stock are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

After this offering, the holders of approximately 193 million shares of our common stock, including those issuable upon the conversion of our preferred 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 price of our common stock.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes has been limited by "ownership changes" and may be further limited.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, and corresponding provisions of state law, if a corporation undergoes an "ownership change" (generally defined as a greater than 50 percentage point change (by value) in its equity ownership over a rolling three-year period), the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes to offset its post-change income may be limited. We have in the past experienced, and we may in the future experience ownership changes as a result of this offering or other changes in our stock ownership (some of which are not in our control). Use of our federal and state net operating loss carryforwards have been limited and could be further limited if we experience additional ownership changes, which could have an adverse effect on our future results of operations.

If we sell shares of our common stock in future financings, stockholders may experience immediate dilution and, as a result, our stock price may decline.

We may from time to time issue additional shares of common stock at a discount from the current trading price of our common stock. As a result, our stockholders would experience immediate dilution upon the purchase of any shares of our common stock sold at such discount. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, including the issuance of debt securities, preferred stock or common stock. If we issue common stock or securities convertible into common stock, our common stockholders would experience additional dilution and, as a result, our stock price may decline.

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 common stock will rely, in part, on the research and reports that industry or financial analysts publish about us or our business. We may never obtain research coverage by industry or financial analysts. If no or few analysts commence coverage of us, the trading price of our stock would likely decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business 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.

If we fail to implement and maintain proper and effective internal control over financial reporting, our ability to produce accurate and timely financial statements could be impaired, investors may lose confidence in our financial reporting and the trading price of our common stock may decline.

Pursuant to Section 404 of Sarbanes-Oxley, our management will be required to report upon the effectiveness of our internal control over financial reporting beginning with the annual report for our fiscal year ending December 31, 2021. When we lose our status as an "emerging growth company," our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex and require significant documentation, testing and possible remediation. To comply with the requirements of being a reporting company under the Exchange Act, we will need to implement additional financial and management controls, reporting systems and procedures and hire additional accounting and finance staff.

We cannot assure you that there will not be material weaknesses in our internal control over financial reporting in the future. Any failure to implement and maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. 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 in our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, 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.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect immediately prior to the consummation of this offering will contain provisions that could delay or prevent changes in control or changes in our management without the consent of our board of directors. These provisions will include the following:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a
  majority of our board of directors;
- · no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the price and other terms of
  those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the
  ownership of a hostile acquiror;
- · the ability of our board of directors to alter our amended and restated bylaws without obtaining stockholder approval;
- the required approval of at least 66 2/3% of the shares entitled to vote at an election of directors to adopt, amend or repeal our amended and restated bylaws or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by our chief executive officer or president or by the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose
  matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of
  proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of us.

We are also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction. For a description of our capital stock, see the section titled "Description of capital stock."

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our amended and restated certificate of incorporation and amended and restated bylaws will provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws to be effective immediately prior to the completion of this offering and our indemnification agreements that we have entered into with our directors and officers will provide that:

- we will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the
  fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good
  faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to
  any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful;
- we may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law;
- we are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification;
- we will not be obligated pursuant to our amended and restated bylaws to indemnify a person with respect to proceedings initiated by that
  person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a
  right to indemnification;
- the rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons; and
- we may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

Our amended and restated certificate of incorporation and amended and restated bylaws will provide for an exclusive forum in the Court of Chancery of the State of Delaware for certain 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 certificate of incorporation and amended and restated bylaws will provide that the Court of Chancery of the State of Delaware is the exclusive forum for any state law derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, any action to interpret, apply, enforce, or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine; provided that, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the

Securities Act or the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction; and provided further that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Nothing in our amended and restated certificate of incorporation or amended and restated bylaws will preclude stockholders that assert claims under the Securities Act or the Exchange Act from bringing such claims in state or federal court, subject to applicable law.

We believe these provisions may benefit us by providing increased consistency in the application of Delaware law and federal securities laws by chancellors and judges, as applicable, particularly experienced in resolving corporate disputes, efficient administration of cases on a more expedited schedule relative to other forums and protection against the burdens of multi-forum litigation. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder. If a court were to find the choice of forum provision that will be contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business, financial condition, results of operations and prospects.

#### Comprehensive tax reform legislation could adversely affect our business and financial condition.

On December 22, 2017, the U.S. government enacted the TCJA, which significantly reforms the Code. The TCJA, among other things, contains significant changes to corporate taxation, including reduction of the U.S. federal income corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, effective January 1, 2018; limitation of the tax deduction for interest expense; limitation of the deduction for net operating losses and elimination of net operating loss carrybacks, in each case, for losses arising in taxable years beginning after December 31, 2017 (though any such tax losses may be carried forward indefinitely); and modifying or repealing many business deductions and credits, including reducing the business tax credit for certain clinical testing expenses incurred in the testing of certain drugs for rare diseases or conditions generally referred to as "orphan drugs." The tax rate change resulted in (i) a reduction in the gross amount of our deferred tax assets recorded as of December 31, 2017, without an impact on the net amount of our deferred tax assets, which are recorded with a full valuation allowance, and (ii) no income tax expense or benefit being recognized as of the enactment date of the TCJA. We continue to examine the impact this tax reform legislation may have on our business. The U.S. Department of Treasury has broad authority to issue regulations and interpretative guidance that may significantly impact how we will apply the law and impact our results of operations in the period issued. As such, the application of accounting guidance for such items is currently uncertain. While we have completed our accounting for the effects of the TCJA, additional regulatory guidance may still be issued by the applicable taxing authorities which could materially affect our tax obligations and effective tax rate.

## Special note regarding forward-looking statements

This prospectus contains forward-looking statements concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business, operations and financial performance and condition. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "contemplate," "continue," "could," "due," "estimate," "expect," "goal," "intend," "may," "objective," "plan," "predict," "potential," "positioned," "seek," "should," "target," "will," "would," and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- the scope, progress, results and costs of developing our product candidates or any other future product candidates, and conducting
  preclinical studies and clinical trials, including our RMC-4630 Phase 1/2 clinical program;
- the scope, progress, results and costs related to the research and development of our pipeline;
- the timing of and costs involved in obtaining and maintaining regulatory approval for any of current or future product candidates, and any
  related restrictions, limitations, and/or warnings in the label of an approved product candidate;
- our expectations regarding the potential market size and size of the potential patient populations for RMC-4630, our other product candidates and any future product candidates, if approved for commercial use;
- our ability to maintain existing, and establish new, collaborations, licensing or other arrangements and the financial terms of any such agreements, including our collaboration with Sanofi:
- · our commercialization, marketing and manufacturing capabilities and expectations;
- the rate and degree of market acceptance of our product candidates, as well as the pricing and reimbursement of our product candidates, if approved;
- the implementation of our business model and strategic plans for our business, product candidates and technology, including additional indications for which we may pursue;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates, including the
  projected term of patent protection;
- estimates of our expenses, future revenue, capital requirements, our needs for additional financing and our ability to obtain additional capital;
- developments and projections relating to our competitors and our industry, including competing therapies and procedures;
- · regulatory and legal developments in the United States and foreign countries;
- · the performance of our third-party suppliers and manufacturers;
- · our ability to attract and retain key scientific or management personnel;
- · our expectations regarding the period during which we will qualify as an emerging growth company under the JOBS Act;

- our expectations regarding our ability to obtain, maintain, enforce and defend our intellectual property protection for our product candidates;
- · our use of proceeds from this offering; and
- · other risks and uncertainties, including those listed under the caption "Risk factors."

These forward-looking statements are based on management's current expectations, estimates, forecasts and projections about our business and the industry in which we operate and management's beliefs and assumptions and are not guarantees of future performance or development and involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this prospectus may turn out to be inaccurate. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under "Risk factors" and elsewhere in this prospectus. Potential investors are urged to consider these factors carefully in evaluating the forward-looking statements. These forward-looking statements speak only as of the date of this prospectus. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this prospectus. See "Where you can find more information."

### Market and industry data

This prospectus contains estimates, projections and other information concerning our industry and, business, as well as data regarding market research, estimates and forecasts prepared by our management. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires.

This industry, business, market and other information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. We have not independently verified any third-party information and cannot assure you of its accuracy or completeness. Although we are responsible for all of the disclosure contained in this prospectus and we believe the market position, market opportunity, market size and other information included in this prospectus is reliable, such information is inherently imprecise. In addition, projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate is necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled "Risk factors" and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

## **Use of proceeds**

We estimate that the net proceeds to us from the sale of shares of our common stock in this offering will be approximately million at an assumed initial public offering price of per share (the midpoint of the price range set forth on the cover of this prospectus), after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their option to purchase additional shares in full, we estimate that the net proceeds will be approximately million at an assumed initial public offering price of per share (the midpoint of the price range set forth on the cover of this prospectus), after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus) would increase (decrease) the net proceeds to us from this offering, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, by \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 in the number of shares we are offering would increase (decrease) the net proceeds to us from this offering, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, by \$ million, assuming the assumed initial public offering price stays the same. We do not expect that a change in the offering price or the number of shares by these amounts would have a material effect on our intended uses of the net proceeds from this offering, although it may impact the amount of time prior to which we may need to seek additional capital.

We currently expect to use our net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, as follows:

- Approximately \$ to \$ million to fund the development of our multiple RAS programs, including our RAS(ON) portfolio and SOS1 program, through completion of IND-enabling studies for one or more development candidates;
- Approximately \$ to \$ million to fund the development of our 4EBP1/mTORC1 program through completion of IND-enabling studies for RMC-5552;
- Approximately \$ to \$ million, net of reimbursement from Sanofi, to fund our share of research costs for the SHP2 program;
- The remaining proceeds for other general corporate purposes, which may include the hiring of additional personnel, capital expenditures
  and the costs of operating as a public company.

Under our collaboration with Sanofi, Sanofi is responsible for reimbursing substantially all of our research costs and all of our development costs for the SHP2 program. We may also use a portion of the remaining net proceeds from this offering and our existing cash, cash equivalents and marketable securities to in-license, acquire or invest in complementary businesses, technologies, products or assets. However, we have no current commitments or obligations to do so.

Due to the uncertainties inherent in the clinical development and regulatory approval process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for the above purposes. As such, our management will retain broad discretion over the use of the net proceeds from this offering. The amounts and timing of our expenditures may depend upon numerous factors, including: (i) continued research and development SHP2 program reimbursement by Sanofi under the Sanofi Agreement; (ii) the time and cost necessary to advance our product candidates through clinical trials and future clinical trials; (iii) the time and cost associated with our research and development activities for our pipeline; (iv) the

time and cost associated with the manufacture and supply of product candidates for clinical development or commercialization; and (v) our ability to obtain regulatory approval for and subsequently commercialize our product candidates.

We believe that the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, will enable us to fund our operations for at least 12 months following the date of this offering. After this offering, we will require substantial capital in order to advance our current and future product candidates through clinical trials, regulatory approval and, if approved, commercialization. For additional information regarding our potential capital requirements, see "Risk factors—Even if this offering is successful, we will require substantial additional financing to achieve our goals, which may not be available on acceptable terms, or at all. A failure to obtain this necessary capital when needed could force us to delay, limit, reduce or terminate our product development or commercialization efforts."

Pending the use of the proceeds from this offering, we intend to invest the net proceeds in interest-bearing, investment-grade securities, certificates of deposit or government securities.

# **Dividend policy**

We have never declared or paid cash dividends on our capital stock. We intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors might deem relevant.

### Capitalization

The following table sets forth our cash, cash equivalents and marketable securities and capitalization as of September 30, 2019:

- · on an actual basis;
- on a pro forma basis to give effect to: (i) the conversion of all 192,699,975 shares of our redeemable convertible preferred stock outstanding as of September 30, 2019 into an equivalent number of shares of our common stock, which will be effective upon the closing of this offering; and (ii) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur immediately prior to the consummation of this offering; and
- on a pro forma as adjusted basis to give further effect to the sale of public offering price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus), after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this information together with our consolidated financial statements and related notes appearing elsewhere in this prospectus and the information set forth under the headings "Selected consolidated financial data," "Unaudited pro forma condensed combined financial statements" and "Management's discussion and analysis of financial condition and results of operations."

	As of September 30, 2019							
		Actual	P	ro forma	a	Pro forma s adjusted(1)		
		(in thous	sands, e	except share	and per	share amounts)		
Cash, cash equivalents and marketable securities(2)	\$	136,288	\$	136,288	\$			
Redeemable convertible preferred stock, \$0.0001 par value per share; 192,904,770 shares authorized, 192,699,975 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted		305,114		_		_		
Stockholders' (deficit) equity:								
Preferred stock, \$0.0001 par value per share; no shares authorized, issued and outstanding, actual; shares authorized, and no shares issued and outstanding, pro forma and pro forma as adjusted						_		
Common stock, \$0.0001 par value per share; 249,000,000 shares authorized, 16,067,480 shares issued and outstanding, actual; shares authorized, 208,767,455 shares issued and outstanding, pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted		2		21				
Additional paid-in capital		3,288		308,383				
Accumulated other comprehensive loss		54		54				
Accumulated deficit		(142,790)		(142,790)				
Total stockholders' (deficit) equity		(139,446)		165,668				
Total capitalization	\$	165.668	\$	165.668	\$			

<sup>(1)</sup> Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus) would increase (decrease) the amount of each of cash, cash equivalents and marketable securities, additional paid-in

capital, total stockholders' equity and total capitalization by \$ , assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) each of cash, cash equivalents and marketable securities, additional paid-in capital, total stockholders' equity and total capitalization by \$ , assuming the assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus) remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma as adjusted information discussed above is illustrative only and will be adjusted based on the actual public offering price and other terms of this offering determined at pricing.

(2) We have classified our marketable securities as available-for-sale, and may sell these securities prior to their stated maturities. We view these marketable securities as available to support current operations, and classify marketable securities with maturities beyond 12 months as current assets under the caption marketable securities in the unaudited condensed consolidated financial statements appearing elsewhere in this prospectus.

The outstanding share information in the table above excludes the following:

- 22,728,675 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2019 having a weighted-average exercise price of \$0.69 per share;
- 1,348,025 shares of common stock issuable upon the exercise of stock options granted after September 30, 2019 having a weighted-average exercise price of \$1.54 per share;
- 5,067,205 shares of common stock reserved for issuance pursuant to future awards under our 2014 Equity Incentive Plan, as amended, as
  of September 30, 2019, which will become available for issuance under our 2020 Incentive Award Plan after consummation of this offering:
- shares of common stock reserved for issuance pursuant to future awards under our 2020 Incentive Award Plan, as well as any
  automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become effective
  on the day prior to the first public trading date of our common stock; and
- shares of common stock reserved for issuance pursuant to future awards under our 2020 Employee Stock Purchase Plan, as well
  as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become
  effective on the day prior to the first public trading date of our common stock.

#### **Dilution**

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

As of September 30, 2019, we had a historical net tangible book value (deficit) of \$(217.6) million, or \$(13.55) per share of common stock. Our historical net tangible book value (deficit) represents total tangible assets less total liabilities and redeemable convertible preferred stock, all divided by 16,067,480 shares of common stock outstanding on September 30, 2019. Our pro forma net tangible book value as of September 30, 2019, before giving effect to this offering, was \$87.5 million, or \$0.42 per share of our common stock. Pro forma net tangible book value, before the issuance and sale of shares in this offering, gives effect to:

- the conversion of all 192,699,975 outstanding shares of our redeemable convertible preferred stock as of September 30, 2019 into an equivalent number of shares of common stock upon the closing of this offering; and
- the filing and effectiveness of our amended and restated certificate of incorporation, which will occur immediately prior to the consummation of this offering.

After giving effect to the sale of shares of common stock in this offering at an assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus) and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of September 30, 2019 would have been \$ million, or \$ per share. This represents an immediate increase in pro forma as adjusted net tangible book value of \$ per share to existing stockholders and an immediate dilution in pro forma net tangible book value of \$ per share to new investors. The following table illustrates this per share dilution:

Assumed initial public offering price per share		\$
Historical net tangible book value (deficit) per share as of September 30, 2019	\$(13.55)	
Pro forma change in historical net tangible book value (deficit) per share attributable to the pro forma		
transactions described in the preceding paragraphs	13.97	
Pro forma net tangible book value per share as of September 30, 2019	0.42	
Increase in pro forma net tangible book value per share attributable to new investors purchasing shares in this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to new investors purchasing shares in this offering		\$

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus) would increase (decrease) our pro forma as adjusted net tangible book value as of September 30, 2019 after this offering by \$ million, or \$ per share, and would decrease (increase) dilution to investors in this offering by \$ per share, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Assuming the assumed initial public price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus) remains the same, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, each increase of 1,000,000 in the number of shares we are offering would increase our pro forma as adjusted net tangible book value as of September 30, 2019 after this offering by \$ million, or \$ per share,

and would decrease dilution to investors in this offering by \$ per share, and a decrease of 1,000,000 in the number of shares we are offering would decrease our pro forma as adjusted net tangible book value as of September 30, 2019 after this offering by \$ million, or \$ per share, and would increase dilution to investors in this offering by \$ per share. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price and other terms of this offering determined at pricing.

If the underwriters fully exercise their option to purchase additional shares, the pro forma as adjusted net tangible book value after this offering would be \$ , the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be \$ per share, and there would be an immediate dilution of \$ per share to new investors, in each case assuming an initial offering price of \$ per share (the midpoint of the price range set forth on the cover of this prospectus).

To the extent that outstanding options with an exercise price per share that is less than the pro forma as adjusted net tangible book value per share are exercised, new investors will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

The following table shows, as of September 30, 2019, on a pro forma as adjusted basis, the number of shares of common stock purchased from us, the total consideration paid or to be paid to us and the average price paid per share by existing stockholders for shares issued prior to this offering and the price to be paid by new investors purchasing common stock in this offering at an assumed initial public offering price of per share (the midpoint of the price range set forth on the cover of this prospectus), before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us:

	Shares pur	chased	Total consi	Average price		
	Number	Percent	Amount	Percent		share
			(in thousands)			
Existing stockholders before this offering	208,767,455	%	\$ 302,379	%	\$	1.45
Investors participating in this offering		%	\$	%	\$	
Total		%	\$	%		

The number of shares of common stock to be outstanding after this offering is based on the number of shares outstanding as of September 30, 2019 and excludes the following:

- 22,728,675 shares of common stock issuable upon the exercise of outstanding stock options as of September 30, 2019 having a weighted-average exercise price of \$0.69 per share;
- 1,348,025 shares of common stock issuable upon the exercise of stock options granted after September 30, 2019 having a weighted-average exercise price of \$1.54 per share;
- 5,067,205 shares of common stock reserved for issuance pursuant to future awards under our 2014 Equity Incentive Plan, as amended, as of September 30, 2019, which will become available for issuance under our 2020 Incentive Award Plan after consummation of this offering;
- shares of common stock reserved for issuance pursuant to future awards under our 2020 Incentive Award Plan, as well as any
  automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become effective
  on the day prior to the first public trading date of our common stock; and

shares of common stock reserved for issuance pursuant to future awards under our 2020 Employee Stock Purchase Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan, which will become effective on the day prior to the first public trading date of our common stock.

### Selected consolidated financial data

The following tables summarize our selected consolidated financial data. You should read this data together with our consolidated financial statements and related notes appearing elsewhere in this prospectus and the information under the caption "Unaudited pro forma condensed combined financial statements" and "Management's discussion and analysis of financial condition and results of operations." The selected consolidated financial data in this section are not intended to replace the financial statements and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this prospectus.

We have derived the following selected consolidated statements of operations data for the years ended December 31, 2017 and 2018 (except for the pro forma net loss per share and the pro forma share information) and the balance sheet data as of December 31, 2017 and 2018 from our audited consolidated financial statements and related notes included elsewhere in this prospectus. The selected consolidated statements of operations data for the nine months ended September 30, 2018 and 2019 and the selected consolidated balance sheet data as of September 30, 2019 are derived from our unaudited interim consolidated financial statements included elsewhere in this prospectus. The unaudited interim financial statements have been prepared in accordance with generally accepted accounting principles in the United Stated and on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to state fairly our financial position as of September 30, 2019 and the results of operations for the nine months ended September 30, 2018 and 2019. On October 24, 2018, we acquired Warp Drive for total consideration valued at \$69.0 million. Our consolidated financial statements included the results of operations of Warp Drive and estimated fair values of assets acquired and liabilities assumed commencing as of the acquisition date. Our historical results are not necessarily indicative of the results that may be expected in the future and results for the nine months ended September 30, 2019 are not necessarily indicative of results to be expected for the full year.

	Year ended December 31,			Nine months ended September 30,				
	2017			2018	2018			2019
	(in thousands, except share and per sha						data)	
Consolidated Statements of Operations Data:								
Revenue:								
Collaboration revenue, related party	\$	_	\$	19,420	\$	9,818	\$	37,953
Collaboration revenue, other		_		745		_		
Total revenue		_		20,165		9,818		37,953
Operating expenses:								
Research and development		26,586		51,084		32,903		64,265
General and administrative		4,543		9,410		5,575		8,244
Total operating expenses		31,129		60,494		38,478		72,509
Loss from operations		(31,129)		(40,329)		(28,660)		(34,556)
Other income (expense), net:								
Interest income		105		777		414		1,571
Interest and other expense		(103)		(116)		(83)		(83)
Change in fair value of redeemable convertible preferred stock liability		_		(2,121)		(2,121)		
Total other income (expense), net		2		(1,460)		(1,790)		1,488
Net loss	\$	(31,127)	\$	(41,789)	\$	(30,450)	\$	(33,068)
Redeemable convertible preferred stock dividends—undeclared and cumulative		(3,763)		(7,031)		(4,512)		(9,987)
Net loss attributable to common stockholders	\$	(34,890)	\$	(48,820)	\$	(34,962)	\$	(43,055)
Net loss per share attributable to common stockholders—basic and diluted(1)	\$	(4.16)	\$	(4.36)	\$	(3.24)	\$	(3.25)
Weighted-average shares used to compute net loss per share attributable to common stockholders —basic and diluted(1)	-8	3,386,173	1	1,186,287	1	0,788,911		13,253,020
Pro forma net loss per share—basic and diluted(1)			\$	(0.35)			\$	(0.19)
Weighted-average shares used in computing pro forma net loss per share—basic and diluted(1)			11	2,714,741			1	77,481,855

(1) For the calculation of our basic and diluted net loss per share attributable to common stockholders, basic and diluted pro forma net loss per share and weighted-average number of shares used in the computation of the per share amounts, see Note 12 to our consolidated financial statements included elsewhere in this prospectus.

	As of Dec	As of December 31,					
	2017	2018	September 30 2019	-,			
		(in thousands)					
Consolidated Balance Sheet Data:							
Cash, cash equivalents and marketable securities	\$ 9,079	\$ 69,586	\$ 136,28	38			
Working capital(1)	1,843	54,879	110,47	77			
Total assets	15,077	170,586	234,74	<del>1</del> 5			
Total liabilities	10,546	73,927	69,07	77			
Redeemable convertible preferred stock	72,248	205,081	305,11	14			
Accumulated deficit	(67,933)	(109,722)	(142,79	<del>)</del> 0)			
Total stockholders' deficit	(67,717)	(108,422)	(139,44	16)			

<sup>(1)</sup> We define working capital as current assets less current liabilities.

## Unaudited pro forma condensed combined financial statements

On October 24, 2018, Revolution Medicines, Inc. (the Company) acquired all outstanding shares of Warp Drive Bio, Inc. (Warp Drive), for total consideration valued at \$69.0 million. Warp Drive was engaged in research involving the use of intracellular biologics to develop transformative medicines. Warp Drive's business included a genome mining platform that was subject to a collaboration agreement with Hoffman-La Roche Ltd. (Roche) involving research in the area of neomorph antibiotics. The genome mining platform was accounted for as held for sale as of the acquisition date and was divested in January 2019.

The acquisition of Warp Drive was accounted for as a business combination in accordance with Accounting Standards Codification Topic 805, *Business Combinations* (ASC 805). The Company's management used its best estimates and assumptions to assign fair values to the tangible and identifiable intangible assets acquired and liabilities assumed and related income tax impacts as of the acquisition date. Goodwill as of the acquisition date was measured as the excess of purchase consideration over the fair value of net tangible and identifiable intangible assets acquired.

The estimated purchase price consideration, as calculated and described in Note 2 to the unaudited pro forma condensed combined statement of operations, has been allocated to the tangible and intangible assets acquired and liabilities assumed based on their respective estimated fair values. The Company has made significant assumptions and estimates in determining the estimated purchase price consideration and the allocation of the estimated purchase price in the unaudited pro forma condensed combined statement of operations.

The following unaudited pro forma condensed combined statement of operations is based upon the historical consolidated statement of operations of the Company and statement of operations of Warp Drive after giving effect to the acquisition, and after applying the assumptions, reclassifications and adjustments described in the accompanying notes. The acquisition of Warp Drive has already been reflected in the Company's historical audited consolidated balance sheet as of December 31, 2018. Therefore, no unaudited pro forma condensed combined balance sheet as of December 31, 2018 has been presented herein.

The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2018 is presented as if the acquisition had occurred on January 1, 2018. The historical consolidated statement of operations has been adjusted in the unaudited pro forma condensed combined statement of operations to give effect to pro forma events that are (1) directly attributable to the acquisition, (2) factually supportable, and (3) expected to have a continuing impact on the combined results following the acquisition. The unaudited pro forma condensed combined statement of operations also reflects the effects of the disposal of the genome mining platform as if it had occurred on January 1, 2018. The unaudited pro forma condensed combined statement of operations should be read in conjunction with the accompanying notes thereto. In addition, the unaudited pro forma condensed combined statement of operations was based on and should be read in conjunction with the:

- separate audited historical consolidated financial statements and accompanying notes of the Company as of and for the year ended December 31, 2018 included elsewhere in this prospectus;
- separate unaudited historical condensed financial statements and accompanying notes of Warp Drive as of and for the nine months ended September 30, 2018 and 2017 included elsewhere in this prospectus; and
- separate audited historical financial statements and accompanying notes of Warp Drive as of and for the years ended December 31, 2017 and 2016 included elsewhere in this prospectus.

The unaudited pro forma condensed combined statement of operations has been presented for informational purposes only. The pro forma information is not necessarily indicative of what the combined company's results

of operations actually would have been had the acquisition been completed as of the dates indicated or that may be achieved in the future.

In addition, the unaudited pro forma condensed combined statement of operations does not purport to project the future operating results of the combined company. The actual results reported by the combined company in periods following the acquisition may differ significantly from those reflected in these unaudited pro forma condensed combined statement of operations for a number of reasons, including cost savings from operating efficiencies, synergies, asset dispositions or restructuring that could result from the acquisition. There were no intercompany transactions between the Company and Warp Drive for the periods presented in the unaudited pro forma condensed combined statement of operations.

# Revolution Medicines, Inc. Unaudited pro forma condensed combined statement of operations

For the year ended December 31, 2018 (in thousands, except per share amounts)

		Histor	ical								
	Mo	volution edicines the year ended ember 31, 2018	fo Ja	arp Drive or period from inuary 1, 2018 to tober 23, 2018	r p d	Genome mining latform isposal Note 3a)		o forma ustments	Note 3		o forma embined
Revenue:											
Collaboration revenue, related party	\$	19,420	\$	882	\$		\$	_	b	\$	20,302
Collaboration revenue, other		745		3,747		(4,492)		_			_
Grant revenue		_		464		(464)					
Total revenue		20,165		5,093		(4,956)		_			20,302
Operating expenses:											
Research and development		51,084		16,025		(4,430)		(300)	c&e&g		62,379
General and administrative		9,410		6,002		_		(1,693)	d & g		13,719
Total operating expenses		60,494		22,027		(4,430)		(1,993)			76,098
Loss from operations		(40,329)		(16,934)		(526)		1,993			(55,796)
Other income (expense), net:											
Gain on restructuring of debt, related party		_		5,054		_		(5,054)	f		_
Interest income		777		105		_		_			882
Interest and other expense		(116)		(1,099)		_		1,099	f		(116)
Change in fair value of redeemable convertible preferred stock liability		(2,121)		_		_		_			(2,121)
Total other income (expense), net		(1,460)		4,060		_		(3,955)		_	(1,355)
Net loss and comprehensive loss	\$	(41,789)	\$	(12,874)	\$	(526)	\$	(1,962)	h	\$	(57,151)
Redeemable convertible preferred stock	•	( , == /	•	( , - ,		( /	•	( )/		•	(= , = )
dividends—undeclared and cumulative		(7,031)				_		(2,414)	i		(9,445)
Net loss attributable to common stockholders	\$	(48,820)	\$	(12,874)	\$	(526)	\$	(4,376)		\$	(66,596)
Net loss per share attributable to common				,		, ,					
stockholders—basic and diluted	\$	(4.36)								\$	(5.95)
Weighted average shares used to compute net											
loss per share attributable to common											
stockholders—basic and diluted		11,186,287								11	1,186,287

See accompanying notes to unaudited pro forma condensed combined statement of operations.

# Revolution Medicines, Inc. Notes to unaudited pro forma condensed combined statement of operations

#### Note 1. Description of transaction and basis of presentation

#### Description of transaction

In October 2018, the Company acquired all outstanding shares of Warp Drive in exchange for issuing 33,079,554 shares of its Series B redeemable convertible preferred stock and cash. Warp Drive, based in Cambridge, Massachusetts, was engaged in research involving the use of intracellular biologics to develop transformative medicines.

#### Basis of presentation

The following unaudited pro forma combined statement of operations for the year ended December 31, 2018 is presented to give effect to the Company's acquisition of Warp Drive on October 24, 2018 for total consideration valued at \$69.0 million. The unaudited pro forma condensed combined statement of operations was prepared in accordance with Article 11 of Regulation S-X.

The acquisition of Warp Drive is accounted for as a business combination in accordance with ASC 805. The accounting standards define the term "fair value" and set forth the valuation requirements for any asset or liability measured at fair value, and specifies a hierarchy of valuation techniques based on the inputs used to develop the fair value measures. Management used its best estimates and assumptions to assign fair value to the tangible and intangible assets acquired and liabilities assumed at the acquisition date. Goodwill as of the acquisition date is measured as the excess of purchase consideration over the fair value of net tangible and identifiable intangible assets acquired.

The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2018 is presented as if the acquisition had occurred on January 1, 2018.

Under the acquisition method of accounting, acquisition-related transaction costs are not included as consideration transferred but are accounted for as expenses in the periods in which the costs are incurred. These costs are not presented in the unaudited pro forma condensed combined statement of operations because they will not have a continuing impact on the combined results.

#### Note 2. Purchase price consideration and allocation

#### Purchase price consideration

The following table presents a summary of the purchase price consideration for the acquisition:

	(in the	ousands)
Series B redeemable convertible preferred stock	\$	68,144
Cash		1,172
Contingently returnable consideration asset		(310)
Total consideration	\$	69,006

The fair value of \$2.06 per share of Series B redeemable convertible preferred stock was determined using a discounted cash flow model to estimate the value of the Company's equity, and subsequently allocated to the Series B redeemable convertible preferred stock using an option pricing method.

# Revolution Medicines, Inc. Notes to unaudited pro forma condensed combined statement of operations

The fair value of the contingently returnable consideration asset was determined using an income-based approach. The key assumptions used in determining the fair value are the discount rate and the probability assigned to the potential holdback.

#### Allocation of purchase price to assets acquired and liabilities assumed

The following table summarizes the estimated fair values of assets acquired and liabilities assumed at the acquisition date, including those held for sale (in thousands):

	(in ti	housands)
Assets acquired:		
Cash and other current assets	\$	1,594
Property and equipment		2,151
In-process research and development—RAS programs		55,800
Developed technology—tri-complex platform		7,480
Developed technology—genome mining platform		6,100
Total assets acquired		73,125
Liabilities assumed:		
Accounts payable and other accrued liabilities		3,790
Convertible note payable, related party		2,000
Deferred revenue		745
Deferred tax liability		12,192
Total liabilities assumed		18,727
Goodwill		14,608
Total	\$	69,006

The valuations of the IPR&D—RAS programs and developed technology—genome mining platform were determined using the income approach, which discounts expected future cash flows to present value. The discount rates used were between 13% and 14%. The projected cash flows were based on key assumptions such as: estimates of revenues and operating profits related to each program or platform considering its stage of development on the acquisition date; the time and resources needed to complete the development and approval of product candidates; the life of the potential commercialized products and associated risks, including the inherent difficulties and uncertainties in developing a product candidate such as obtaining marketing approval from the FDA and other regulatory agencies; and risks related to the viability of and potential alternative treatments in any future target markets.

Intangible assets associated with acquired IPR&D relate to the RAS programs. Management determined that the estimated acquisition-date fair value of the intangible asset related to IPR&D was \$55.8 million, which was comprised of \$44.1 million related to the KRAS<sup>G12C</sup> program and \$11.7 million related to the KRAS<sup>G12D</sup> program. The KRAS<sup>G12C</sup> and KRAS<sup>G12D</sup> programs are each focused on developing inhibitors which target specific mutations of KRAS(ON) proteins. The acquired IPR&D is considered to be an indefinite-lived asset until the completion or abandonment of the research and development efforts. The acquired IPR&D will not be amortized until completion of the related products which is determined by when the underlying programs reach technological

# Revolution Medicines, Inc. Notes to unaudited pro forma condensed combined statement of operations

feasibility and commence commercial production. Upon completion, the acquired IPR&D will be amortized over its useful life.

The valuation of the developed technology—tri-complex platform was based on a replacement cost approach as the Company's management intends to leverage the platform internally, but does not have the ability to assign a specific income stream to the asset. The tri-complex platform was accounted for as developed technology and is being amortized over 7 years.

The genome mining platform, including the associated Roche collaboration agreement, was accounted for as held for sale developed technology and was divested in January 2019.

The Company assumed a convertible promissory note of \$2.0 million as part of the acquisition. Subsequent to the acquisition, at the Company's election, the convertible promissory note was converted into 975,620 shares of Series B redeemable convertible preferred stock.

The Company recorded \$14.6 million in goodwill associated with this acquisition, which relates to the establishment of a deferred tax liability for the non-deductible in-process research and development intangible assets acquired and synergies resulting from the acquisition. Goodwill will not be amortized but will be tested at least annually for impairment. Goodwill recognized in the acquisition is not expected to be deductible for tax purposes.

#### Note 3. Pro forma adjustments

This note should be read in conjunction with "Note 1. Description of transaction and basis of presentation" and "Note 2. Purchase price consideration and allocation." Adjustments included in the column under the heading "Pro Forma Adjustments" represent the following:

- (a) The unaudited pro forma condensed combined statement of operations gives consideration to the impact of the genome mining platform disposition. In January 2019, the Company sold the genome mining platform and related Roche collaboration agreement acquired during the Warp Drive acquisition to Gingko Bioworks (Gingko). The adjustments reflect the elimination of the historical operating results of the genome mining platform for the year ended December 31, 2018 at the amounts that have been reflected in the Company's and Warp Drive's statements of operations for this period. These amounts are based on the best available information and certain assumptions that the Company's management believe are reasonable, such as allocated resources. These amounts do not include allocations of corporate overhead expenses included in general and administrative expenses.
- (b) Effective January 1, 2018, the Company adopted ASC 606. Warp Drive's revenue recognition policy was in accordance with ASC 605. The Company evaluated the impact of aligning the revenue recognition policy for collaboration revenue, related party for Warp Drive to ASC 606 and determined the impact was not material.

# Revolution Medicines, Inc. Notes to unaudited pro forma condensed combined statement of operations

(c) To record amortization expense associated with the acquired intangible assets (in thousands, except for estimated useful life).

Intangible asset	Fair value	Estimated useful life	Amortization for the period from January 1, 2018 to October 23, 2018	Line item in statement of operations
Developed technology—tri-complex platform	\$ 7,480	7 years	\$ 867	Research and development

- (d) To eliminate transaction costs of \$1.0 million that have been incurred by the Company and Warp Drive related to the Warp Drive acquisition included in general and administrative expenses.
- (e) To eliminate historical depreciation expense and recognize new depreciation expense based on the fair value of property and equipment and the estimated remaining useful lives of assets acquired. Depreciation is calculated on a straight-line basis.

Property and equipment	Depreciation for the period from January 1, 2018 to October 23, 2018	Line item in statement of operations
	(in thousands)	-
Elimination of historical depreciation expense for acquired property and	· ·	
equipment	(744)	Research and development
Depreciation expense for acquired property and equipment	376	Research and development
Total depreciation expense adjustment	(368)	·

- (f) To eliminate interest expense of \$1.1 million and gain on the restructuring of debt of \$5.1 million related to Warp Drive's convertible note payable, which was converted into Warp Drive common stock immediately prior to the acquisition and subsequently converted into the Company's Series B redeemable convertible preferred stock in connection with the acquisition.
- (g) To eliminate severance costs of \$1.4 million of certain Warp Drive employees recorded in the Company's historical financial statements as a non-recurring charge directly related to the acquisition.

Line item in statement of operations	Severance costs
	(in thousands)
Research and development	799
General and administrative	648
Total severance costs	1,447

- (h) No pro forma adjustments have been made to the provision for income taxes as both the Company and Warp Drive have no provision for income taxes for the respective periods presented due to full valuation allowances.
- (i) To record the redeemable convertible preferred stock dividends—undeclared and cumulative on Series B redeemable convertible preferred stock issued in connection with the acquisition as if the acquisition occurred on January 1, 2018.

# Management's discussion and analysis of financial condition and results of operations

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with the consolidated financial statements and the related notes included elsewhere in this prospectus. In addition to historical financial information, this discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk factors" and elsewhere in this prospectus.

#### Overview

We are a clinical-stage precision oncology company focused on developing novel targeted therapies to inhibit elusive, high-value *frontier* targets within notorious growth and survival pathways, with particular emphasis on the RAS and mTOR signaling pathways. Our understanding of genetic drivers and adaptive resistance mechanisms in cancer, coupled with robust drug discovery and medicinal chemistry capabilities, has guided us to establish a deep pipeline targeting critical signaling nodes within these pathways. This cohesive approach underpins our clinical strategy of exploring mechanism-based dosing paradigms and in-pathway combinations to optimize treatment for cancer patients.

Our most advanced product candidate, RMC-4630, is a potent and selective inhibitor of SHP2, a central node in the RAS signaling pathway. In collaboration with Sanofi, we are evaluating RMC-4630 in a multi-cohort Phase 1/2 clinical program. This RMC-4630 Phase 1/2 program currently consists of two active clinical trials: RMC-4630-01, a Phase 1 study of RMC-4630 as a single agent, and RMC-4630-02, a Phase 1b/2 study of RMC-4630 in combination with the MEK inhibitor cobimetinib (Cotellic). In this prospectus, we report preliminary data from 63 patients who had enrolled in our Phase 1 study and received RMC-4630 as a monotherapy as of November 6, 2019 and from 8 patients who had enrolled in our Phase 1b/2 combination study and received RMC-4630 as of November 14, 2019. Leveraging our proprietary tri-complex technology platform, we are also developing a portfolio of mutant-selective RAS inhibitors that we believe are the first potent, selective, cell-active inhibitors of the active, GTP-bound form of RAS, or RAS(ON). Initially, we will prioritize four mutant RAS(ON) targets—KRAS<sup>G12C</sup>, KRAS<sup>G13C</sup>, KRAS<sup>G13C</sup>, KRAS<sup>G12C</sup>—and expect to nominate our first development candidate in 2020. Our pipeline also includes inhibitors of other key nodes within the RAS and mTOR signaling pathways, such as SOS1 and mTORC1. We believe our deep, differentiated pipeline and development strategies provide us with the opportunity to pioneer novel treatment regimens to maximize the depth and durability of clinical benefit and circumvent adaptive resistance mechanisms for patients with cancers dependent on these critical pathways.

In addition, we have two preclinical programs targeting other key nodes in the RAS and mTOR signaling pathways. Our program targeting SOS1, a protein that plays a key role in converting RAS(OFF) to RAS(ON) in cells, is currently in lead generation stage. In addition, our preclinical development candidate, RMC-5552, is designed to selectively and deeply inhibit mTORC1, thereby preventing phosphorylation and inactivation of 4EBP1, a downstream protein in the mTOR signaling pathway that normally suppresses expression of certain oncogenes such as C-MYC. We advanced RMC-5552 into IND-enabling development in June 2019.

We have incurred net losses in each year since inception in 2014. Our net losses were \$31.1 million and \$41.8 million for the years ended December 31, 2017 and 2018, respectively, and \$30.5 million and \$33.1 million for the nine months ended September 30, 2018 and 2019, respectively. As of September 30, 2019, we had an accumulated deficit of \$142.8 million. Substantially all of our net losses have resulted from costs incurred in connection with our research and development programs and from general and administrative costs associated

with our operations. We expect to continue to incur significant expenses and increasing operating losses over at least the next several years. We expect our expenses will increase in connection with our ongoing activities, as we:

- · continue our platform research and drug discovery efforts to identify product candidates;
- · advance product candidates through preclinical programs and clinical trials;
- · manufacture supplies for our preclinical studies and clinical trials;
- · pursue regulatory approval of product candidates;
- · operate as a public company following completion of this offering;
- · maintain, protect and expand our portfolio of intellectual property rights, including patents, trade secrets and know-how; and
- hire additional personnel to support our development programs and secure additional facilities to support our operations.

#### Collaboration agreement with Sanofi

In June 2018, we entered into a collaborative research, development and commercialization agreement with Aventis, Inc. (an affiliate of Sanofi), or the Sanofi Agreement, to research and develop SHP2 inhibitors, including RMC-4630, for any indications. The Sanofi Agreement was assigned to Genzyme Corporation, a Sanofi affiliate, in December 2018. For the purposes of this discussion, we refer to Genzyme Corporation as Sanofi. Pursuant to the Sanofi Agreement, we granted Sanofi a worldwide, exclusive, sublicensable (subject to our consent in certain circumstances) license under certain of our patents and know-how to research, develop, manufacture, use, sell, offer for sale, import and otherwise commercialize SHP2 inhibitors, including RMC-4630, for any and all uses, subject to our exercise of rights and performance of obligations under the Sanofi Agreement. Such intellectual property exclusively licensed to Sanofi includes our interest under any of our solely-owned or jointly-owned inventions arising out of activities undertaken pursuant to the development of SHP2 inhibitor product candidates under the Sanofi Agreement.

Under the Sanofi Agreement, we have primary responsibility for performing preclinical research on SHP2 inhibitors, pursuant to an initial research plan and budget directed toward the identification, validation and optimization of SHP2 inhibitors for 2018-2020. The research plan and budget beyond 2020 will be determined by a joint research and development committee, over which Sanofi has final decision-making power subject to certain exceptions. We have primary responsibility for early clinical development of RMC-4630 pursuant to an initial development plan. The joint research and development committee is responsible for preparing development plans for other SHP2 inhibitors approved by such committee for development, if any. Sanofi is responsible for 80% of all internal and external research costs and expenses incurred under the research plan for 2019 and 2020, and for all other internal and external costs and expenses incurred to perform activities under the research plan for 2019 and 2020, in which our share of these costs is estimated to be approximately \$2 million in total, representing less than three percent of the anticipated overall budget for the SHP2 program in 2019 and 2020. Sanofi is responsible for all costs under the development plan, and since our SHP2 program is in clinical development, the costs under the development plan are expected to be significantly greater than the costs under the research plan. We are responsible for the manufacture of SHP2 inhibitors for Phase 1 and non-registrational Phase 2 clinical trials at Sanofi's cost, while Sanofi is responsible for manufacturing SHP2 inhibitors for all other clinical trials and commercial supply. Sanofi has the sole right and responsibility to perform all regulatory activities under the Sanofi

Agreement, except with respect to certain trials conducted by us or otherwise conducted under our IND, including our current clinical trials evaluating RMC-4630. Once we have completed all clinical trials for a product candidate that are assigned to us under a development plan, all regulatory approvals for such product candidate are automatically assigned to Sanofi. Unless otherwise delegated to us by the joint commercialization committee, Sanofi also has the sole right and responsibility for all aspects of the commercialization of SHP2 inhibitors in the world for any and all uses, at its expense, subject to our right to elect to co-promote SHP2 inhibitors in the United States. Sanofi is obligated to use commercially reasonable efforts to seek marketing approval for at least one SHP2 inhibitor product candidate in certain major market countries. Sanofi agrees to provide us, and we agree to provide Sanofi, with research, development and commercialization updates through the joint committees.

Pursuant to the Sanofi Agreement, we received an upfront payment of \$50 million from Sanofi in July 2018. Upon the achievement of specified development and regulatory milestones, Sanofi will be obligated to pay us up to \$520 million in the aggregate, including up to \$235 million upon the achievement of specified development milestones and up to \$285 million upon achievement of certain marketing approval milestones. In the United States, we will share equally with Sanofi the profits and losses applicable to commercialization of SHP2 inhibitor products, pursuant to a profit/loss share agreement that the parties will negotiate based on key terms agreed in the Sanofi Agreement. On a product-by-product basis, Sanofi will also be required to pay us tiered royalties on annual net sales of each product outside the United States ranging from high single digit to mid-teen percentages. The royalty payments are subject to reduction under specified conditions set forth in the Sanofi Agreement. Subject to certain exceptions, the royalties are payable on a product-by-product and country-by-country basis until the latest of the expiration of all valid claims covering such product in such country contained in the patents licensed to Sanofi under the Sanofi Agreement and the expiration of regulatory exclusivity for such product in such country.

Sanofi has the sole and exclusive right to file, prosecute and maintain any patents licensed to it pursuant to the Sanofi Agreement, as well as to enforce infringement of or defend claims against such patents that relate to SHP2 inhibitor products.

Unless terminated earlier, the Sanofi Agreement will continue in effect until the later of the expiration of all of Sanofi's milestone and royalty payment obligations and the expiration of the profit/loss share agreement. Upon expiration of the Sanofi Agreement, the licenses granted to Sanofi thereunder shall become fully paid-up, royalty-free, perpetual and irrevocable. Sanofi may terminate the Sanofi Agreement in its entirety or on a country-by-country or product-by-product basis for any reason or for significant safety concerns, upon prior notice to us within certain specified time periods. Sanofi may terminate the Sanofi Agreement in its entirety upon our change of control, with prior notice. Either party may terminate the Sanofi Agreement if an undisputed material breach by the other party is not cured within a defined period of time, or immediately upon notice for insolvency-related events of the other party. We may terminate the Sanofi Agreement after a certain number of years if Sanofi develops a competing program without commencing a registrational clinical trial for a SHP2 inhibitor product candidate, and subject to certain other conditions. We may also terminate the Sanofi Agreement at any time, if Sanofi ceases certain critical activities for SHP2 inhibitor product candidates for more than a specified period of time, provided that such cessations of critical activity were not a result of certain specified factors, and subject to certain other conditions. Upon any termination of the Sanofi Agreement with respect to any product or country, all licenses to Sanofi with respect to such product or country shall automatically terminate and all rights generally revert back to us. If the Sanofi Agreement is terminated, in its entirety or with respect to a product, other than by us for Sanofi's material breach or insolvency, we may be required to pay Sanofi royalties on worldwide net sales of reverted products up to mid-single digit percentages based on the development and regulatory status of such reverted products, in each case subject to reductions in accordance with the terms of the Sanofi Agreement.

Through September 30, 2019, we have received an aggregate of \$83.5 million from Sanofi, including the upfront payment and research and development expense reimbursements.

#### **Acquisition of Warp Drive**

In October 2018, we acquired all outstanding shares of Warp Drive Bio, Inc., or Warp Drive. In connection with the acquisition, we issued 33,079,554 shares of our Series B preferred stock and \$0.9 million in other consideration, for total consideration valued at \$69.0 million. The operating results associated with Warp Drive programs are reflected in our consolidated financial statements beginning on the closing date of the transaction.

In connection with the Warp Drive acquisition, we recorded \$55.8 million of in-process research and development, or IPR&D, and \$13.6 million of developed technology related to the tri-complex and genome mining platforms. Warp Drive's RAS programs were accounted for as an IPR&D asset. The IPR&D asset is considered to be an indefinite-lived asset until the completion or abandonment of the associated research and development efforts. Warp Drive's tri-complex development platform was accounted for as developed technology and is being amortized over seven years. Warp Drive's genome mining platform was accounted for as held for sale developed technology and was divested in January 2019 when we sold this genome mining platform to Ginkgo Bioworks, Inc., or Ginkgo.

In addition, we recorded \$14.6 million in goodwill associated with the Warp Drive acquisition, which largely relates to the establishment of a deferred tax liability for the non-deductible IPR&D intangible assets acquired. Goodwill will not be amortized. Goodwill and IPR&D will be tested at least annually for impairment. No impairment has been recognized as of September 30, 2019.

#### Components of results of operations

#### Collaboration revenue

Collaboration revenue, related party, consists of revenue under the Sanofi Agreement for our SHP2 program. We entered into the Sanofi Agreement in June 2018 and Sanofi subsequently became a related party in October 2018 as it was a stockholder of Warp Drive to which we issued equity in connection with the acquisition. We received a \$50.0 million upfront payment from Sanofi in July 2018, receive reimbursement for research and development services, and are entitled to future potential development and regulatory milestones.

Collaboration revenue, other, consists of revenue under our collaboration agreement with F. Hoffmann-La Roche Ltd and Hoffmann-La Roche Inc. that we became a party to in October 2018 as part of the Warp Drive acquisition. This collaboration agreement was divested to Ginkgo in January 2019.

For further information on our revenue recognition policies, see the section titled "Critical accounting policies, significant judgments, and use of estimates—Revenue recognition."

#### Research and development expenses

We substantially rely on third parties to conduct our preclinical studies, clinical trials and manufacturing. We estimate research and development expenses based on estimates of services performed, and rely on third party contractors and vendors to provide us with timely and accurate estimates of expenses of services performed to assist us in these estimates. Research and development expenses consist primarily of costs incurred for the development of our product candidates and costs associated with identifying compounds through our discovery platform, which include:

 expenses incurred under agreements with third-party contract organizations, investigative clinical trial sites that conduct research and development activities on our behalf, and consultants;

- costs related to production of clinical materials, including fees paid to contract manufacturers;
- laboratory and vendor expenses related to the execution of discovery programs, preclinical and clinical trials;
- · employee-related expenses, which include salaries, benefits and stock-based compensation; and
- facilities and other expenses, which include allocated expenses for rent and maintenance of facilities, depreciation and amortization expense, information technology and other supplies.

We expense all research and development costs in the periods in which they are incurred. Costs for certain development activities are recognized based on an evaluation of the progress to completion of specific tasks using information and data provided to us by our vendors, collaborators and third-party service providers. Nonrefundable advance payments for goods or services to be received in future periods for use in research and development activities are deferred and recorded as prepaid assets. The prepaid amounts are then expensed as the related goods are delivered or as services are performed.

Under the Sanofi Agreement, all of our RMC-4630 research and development expenses incurred from June 2018 to December 2018 have been reimbursed by Sanofi. All RMC-4630 development expenses and 80% of RMC-4630 research expenses in 2019 are reimbursable by Sanofi. These reimbursements from Sanofi are recorded as collaboration revenue. We are responsible for early non-registrational clinical trials and Sanofi is responsible for conducting registrational clinical trials.

We expect our research and development expenses to increase substantially for the foreseeable future as we continue to invest in discovering and developing product candidates and advancing product candidates into later stages of development, which may include conducting larger clinical trials. The process of conducting the necessary research and development and clinical trials to seek regulatory approval for product candidates is costly and time-consuming, and the successful development of our product candidates is highly uncertain. As a result, we are unable to determine the duration and completion costs of our research and development projects or clinical trials or if and to what extent we will generate revenue from the commercialization and sale of any of our product candidates.

#### General and administrative expenses

General and administrative expenses consist primarily of personnel-related costs, consultants and professional services expenses, including legal, audit, accounting and human resources services, allocated facilities and information technology costs, and other general operating expenses not otherwise classified as research and development expenses. Personnel-related costs consist of salaries, benefits and stock-based compensation. Facilities costs consist of rent, utilities and maintenance of facilities. We expect our general and administrative expenses to increase for the foreseeable future due to anticipated increases in headcount and as a result of operating as a public company, including expenses related to compliance with the rules and regulations of the Securities and Exchange Commission, the Nasdaq Global Market, additional insurance expenses, investor relations activities and other administrative and professional services.

#### Interest income

Interest income primarily consists of interest earned on our cash equivalents and marketable securities.

#### Interest and other expense

Interest and other expense primarily consists of interest related to our capital lease and interest on other outstanding obligations.

#### Change in fair value of redeemable convertible preferred stock liability

Our March 2018 issuance and sale of Series B redeemable convertible preferred stock was tranched into two funding dates, a first closing in March 2018, and a second closing to purchase additional shares in June 2018. We classified the obligation for the future purchase of additional shares under the second closing as a liability on our consolidated balance sheets as the obligation met the definition of a freestanding financial instrument. This redeemable convertible preferred stock tranche liability was initially recorded at fair value upon the date of issuance and was subsequently remeasured to fair value at each reporting date. Changes in the fair value of the redeemable convertible preferred stock liability were recognized in the consolidated statements of operations and comprehensive loss until the obligation for the second tranche was fulfilled upon the second closing date in June 2018.

#### Comparison of the results for the nine months ended September 30, 2018 and 2019

		Nine months ended September 30,				
	2018	2019	(de	ecrease)		
	(in tho	(in thousands)				
Revenue:						
Collaboration revenue, related party	\$ 9,818	\$ 37,953	\$	28,135		
Operating expenses:						
Research and development	32,903	64,265		31,362		
General and administrative	5,575	8,244		2,669		
Total operating expenses	38,478	72,509		34,031		
Loss from operations	(28,660)	(34,556)		(5,896)		
Other income (expense), net:						
Interest income	414	1,571		1,157		
Interest and other expense	(83)	(83)		_		
Change in fair value of redeemable convertible preferred stock liability	(2,121)	<u>'—</u> '		2,121		
Total other income (expense), net	(1,790)	1,488		3,278		
Net loss	\$ (30,450)	\$ (33,068)	\$	(2,618)		

#### Collaboration revenue

Collaboration revenue, related party consists of revenue under the Sanofi Agreement, which was entered into in June 2018. Collaboration revenue, related party increased by \$28.1 million, or 287%, during the nine months ended September 30, 2019 compared to the same period in 2018. The increase in collaboration revenue, related party during the nine months ended September 30, 2019 was primarily due to increased research and development costs incurred by us for our SHP2 program under the Sanofi Agreement, which are subject to reimbursement by Sanofi to us and which advanced into a Phase 1 clinical trial in the third quarter of 2018. Cash received from Sanofi during the nine months ended September 30, 2018 and 2019 was \$51.6 million and \$26.1 million, respectively. Revenue is recognized based on actual costs incurred relative to total estimated costs expected to fulfill the performance obligation. Accordingly, the timing of revenue recognition is not directly correlated to the timing of cash receipts.

#### Research and development expenses

Research and development expenses increased by \$31.4 million, or 95%, during the nine months ended September 30, 2019 compared to the same period in 2018. The increase in research and development expenses during the nine months ended September 30, 2019 was primarily due to a \$9.2 million increase in third party expenses for our SHP2 program, which advanced into a Phase 1 clinical trial in the third quarter of 2018; a \$8.9 million increase in third party costs for our RAS programs, which was acquired as part of the Warp Drive acquisition in October 2018; a \$4.5 million increase in third party costs for our SOS1 program, which commenced in 2019; a \$4.5 million increase in facilities and other allocated expenses as a result of higher rent, lab supplies, utilities and information technology expenses associated with higher headcount in 2019; a \$3.4 million increase in salaries and other employee-related expenses due to increased headcount to support our research and development programs; and a \$0.8 million increase related to amortization of developed technology acquired as part of the Warp Drive acquisition.

#### General and administrative expenses

General and administrative expenses increased by \$2.7 million, or 48%, during the nine months ended September 30, 2019 compared to the same period in 2018. The increase was primarily due to an increase of personnel-related expenses of \$1.0 million related to higher headcount in 2019; an increase of \$0.6 million in stock-based compensation expense; an increase of \$0.6 million in legal, accounting and consulting expenses; and an increase of \$0.4 million in facilities and other allocated expenses as a result of higher rent, utilities and information technology expenses associated with higher headcount in 2019.

#### Interest income

Interest income increased by \$1.2 million the nine months ended September 30, 2019 compared to the same period in 2018. The increase was primarily due to interest income earned from higher average investment balances resulting from the net proceeds from our Series B preferred stock financing in 2018, the upfront payment from Sanofi received in 2018, and our Series C preferred stock financing in 2019.

#### Interest and other expense

Interest and other expense was \$0.1 million for both the nine months ended September 30, 2019 and 2018.

#### Change in fair value of redeemable convertible preferred stock liability

The liability associated with our Series B redeemable convertible preferred stock was remeasured to fair value at each reporting date until it was settled in June 2018, and we recognized the changes in the fair value in our consolidated statements of operations and comprehensive loss during the nine months ended September 30, 2018. As the liability was settled in 2018, there were no amounts recorded to the consolidated statements of operations and comprehensive loss during the nine months ended September 30, 2019 associated with this liability.

#### Comparison of the results for the years ended December 31, 2017 and 2018

	Year ended December 31,					
		2017	2018		Increase / (decrease)	
			ousands)			
Revenue:						
Collaboration revenue, related party	\$	_	\$	19,420	\$	19,420
Collaboration revenue, other		_		745		745
Total revenue		_		20,165		20,165
Operating expenses:						
Research and development		26,586		51,084		24,498
General and administrative		4,543		9,410		4,867
Total operating expenses		31,129		60,494		29,365
Loss from operations		(31,129)		(40,329)		(9,200)
Other income (expense), net:						
Interest income		105		777		672
Interest and other expense		(103)		(116)		(13)
Change in fair value of redeemable convertible preferred stock liability		_		(2,121)		(2,121)
Total other income (expense), net		2		(1,460)		(1,462)
Net loss and comprehensive loss	\$	(31,127)	\$	(41,789)	\$	(10,662)

#### Collaboration revenue

Collaboration revenue, related party consists of revenue under the Sanofi Agreement, which was entered into in June 2018. Collaboration revenue, related party for the years ended December 31, 2017 and 2018 was zero and \$19.4 million, respectively. Cash received from Sanofi during the years ended December 31, 2017 and 2018 was zero and \$57.4 million, respectively. Revenue is recognized based on actual costs incurred relative to total estimated costs expected to fulfill the performance obligation. Accordingly, the timing of revenue recognition is not directly correlated to the timing of cash receipts.

#### Research and development expenses

Research and development expenses increased by \$24.5 million, or 92%, during the year ended December 31, 2018 compared to the same period in 2017. The increase in research and development expenses in 2018 was primarily due to a \$6.7 million increase in salaries and other employee-related expenses due to increased headcount to support our research and development programs; a \$6.3 million increase in third party expenses for our SHP2 program, which advanced into a Phase 1 clinical trial in the third quarter of 2018; a \$4.2 million increase in facilities and other allocated expenses as a result of higher rent, lab supplies, utilities and information technology expenses associated with higher headcount in 2018; a \$3.4 million increase in third party expenses for our 4EBP1/mTORC1 program due to advancing the program into the lead optimization phase in 2018, which included increased pharmacology, chemistry CROs, and preliminary safety assessment costs; a \$3.1 million increase in third party expenses related to our discovery programs; and a \$0.5 million increase in stock-based compensation expense.

#### General and administrative expenses

General and administrative expenses increased by \$4.9 million, or 107%, during the year ended December 31, 2018 compared to 2017. The increase was primarily due to an increase of personnel-related expenses of \$2.3 million related to higher headcount in 2018; an increase of \$2.3 million in legal, accounting and consulting expenses primarily due to business development transactions and increased intellectual property activities; and an increase of \$0.3 million in stock-based compensation expense.

#### Interest income

Interest income increased by \$0.7 million during the year ended December 31, 2018 compared to 2017. The increase was primarily due to interest income earned from higher average investment balances resulting from the net proceeds from our Series B preferred stock financing and the upfront payment from Sanofi received in 2018.

#### Interest and other expense

Interest and other expense was \$0.1 million for both the years ended December 31, 2018 and December 31, 2017.

#### Change in fair value of redeemable convertible preferred stock liability

The liability associated with our Series B redeemable convertible preferred stock was remeasured to fair value at each reporting date until it was settled in June 2018, and we recognized the changes in the fair value in our consolidated statements of operations and comprehensive loss during the year ended December 31, 2018.

#### Liquidity and capital resources

#### Liquidity

Since our inception through September 30, 2019, our operations have been financed primarily by net proceeds of \$230.6 million from the issuance of our preferred stock and \$83.5 million in proceeds received under the Sanofi Agreement. As of September 30, 2019, we had \$136.3 million in cash, cash equivalents and marketable securities.

#### Future funding requirements

As of September 30, 2019, we had an accumulated deficit of \$142.8 million. Our primary use of cash is to fund operating expenses, which consist primarily of research and development expenditures related to our product candidates and our discovery programs, and to a lesser extent, general and administrative expenditures. We expect our expenses to continue to increase in connection with our ongoing activities, in particular as we continue to advance our product candidates and our discovery programs. In addition, upon the completion of this offering, we expect to incur additional costs associated with operating as a public company.

Based upon our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities will enable us to fund our planned operations for at least 12 months following the date of this offering. We have based this estimate on assumptions that may prove to be inaccurate, and we could utilize our available capital resources sooner than we currently expect.

The timing and amount of future funding requirements will depend on many factors, including:

- the scope, progress, results and costs of researching and developing our product candidates and programs, and of conducting preclinical studies and clinical trials;
- the timing of, and the costs involved in, obtaining marketing approvals for product candidates we develop if clinical trials are successful;
- the success of our collaboration with Sanofi, including the continued reimbursement by Sanofi of substantially all of our research costs and all of our development costs for the SHP2 program under the Sanofi Agreement;
- whether we achieve certain clinical and regulatory milestones under our collaboration agreement with Sanofi, each of which would trigger additional payments to us;
- the cost of commercialization activities for RMC-4630, to the extent not borne by Sanofi, and any other future product candidates we
  develop, whether alone or in collaboration, including marketing, sales and distribution costs if RMC-4630 or any other product candidate we
  develop is approved for sale;
- the cost of manufacturing our current and future product candidates for clinical trials in preparation for marketing approval and in preparation for commercialization;
- · our ability to establish and maintain strategic licenses or other arrangements and the financial terms of such agreements;
- the costs involved in preparing, filing, prosecuting, maintaining, expanding, defending and enforcing patent claims, including litigation costs and the outcome of such litigation;
- · the timing, receipt and amount of sales of, profit share or royalties on, our future products, if any;
- · the emergence of competing cancer therapies and other adverse market developments; and
- any plans to acquire or in-license other programs or technologies.

We expect to need to obtain substantial additional funding in the future for our research and development activities and continuing operations. Sanofi reimburses us for almost all of our research and development expenses associated with our SHP2 program, however Sanofi has the right to terminate the Sanofi Agreement for any reason, upon prior notice to us within certain specified time periods and upon any such termination by Sanofi with respect to any product or country, all licenses to Sanofi with respect to such product or country shall automatically terminate and all rights generally revert back to us. If we need to raise additional capital to fund our operations, funding may not be available to us on acceptable terms, or at all. If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of or suspend one or more of our clinical trials, research and development programs or commercialization efforts. We may seek to raise any necessary additional capital through a combination of public or private equity offerings, debt financings and collaborations or licensing arrangements. If we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable to raise capital, we may need to delay, reduce or terminate planned activities to reduce costs. Doing so will likely harm our ability to execute our business plans.

#### **Cash flows**

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

	Year ended December 31,				Nine months ended September 30,			
	2017		2018		2018	2019		
	(in thousands)							
Cash provided by (used in) operating activities	\$	(25,148)	\$	1,213	\$12,989	\$ (37,964)		
Cash used in investing activities		(1,575)		(1,339)	(1,283)	(109,990)		
Cash provided by financing activities		22,662		60,847	56,626	100,192		
Net (decrease) increase in cash, cash equivalents and restricted cash	\$	(4,061)	\$	60,721	\$68,332	\$ (47,762)		

#### Cash provided by (used in) operating activities

During the year ended December 31, 2018, cash provided by operating activities of \$1.2 million was attributable to a net change of \$38.1 million in our operating assets and liabilities and \$4.9 million in non-cash charges, partially offset by a net loss of \$41.8 million. The non-cash charges consisted of depreciation and amortization of \$1.8 million, stock-based compensation expense of \$0.9 million, a change in the fair value of our redeemable convertible preferred stock liability of \$2.1 million, and a loss on disposal of property and equipment of \$0.2 million. The change in operating assets and liabilities was primarily due to a \$44.5 million increase in deferred revenue associated with the Sanofi Agreement, a \$2.0 million increase in accounts payable and accrued liabilities resulting from increases in spend for research and development, offset by a \$7.3 million increase in receivable from a related party resulting from the Sanofi Agreement and a \$0.9 million increase in prepaid expenses and other current assets primarily resulting from the timing of prepayments made for research and development activities.

During the year ended December 31, 2017, cash used in operating activities of \$25.1 million was attributable to a net loss of \$31.1 million, partially offset by \$1.3 million in non-cash charges and a net change of \$4.7 million in our operating assets and liabilities. The non-cash charges consisted of depreciation and amortization of \$1.2 million and stock-based compensation expense of \$0.1 million. The change in operating assets and liabilities was primarily due to a \$4.0 million increase in accounts payable and accrued liabilities resulting from increases in spend for research and development, and a \$0.6 million decrease in prepaid expenses and other current assets resulting from the timing of prepayments made for research and development activities.

During the nine months ended September 30, 2019, cash used in operating activities of \$38.0 million was attributable to a net loss of \$33.1 million and a net change of \$9.5 million in our operating assets and liabilities, partially offset by \$4.6 million in non-cash charges. The non-cash charges primarily consisted of depreciation and amortization of \$2.5 million, stock-based compensation expense of \$1.8 million, and a loss on disposal of held-for-sale assets of \$0.6 million, offset by accretion of marketable securities of \$0.3 million. The change in operating assets and liabilities was primarily due to a \$10.1 million decrease in deferred revenue associated with the Sanofi Agreement, a \$1.9 million increase in prepaid expenses and other current assets resulting from the timing of prepayments made for research and development activities, a \$1.6 million increase in receivable from a related party resulting from the Sanofi Agreement, a \$1.3 million increase in other noncurrent assets, offset by a \$5.7 million increase in accounts payable and accrued liabilities primarily resulting from increases in spend for research and development.

During the nine months ended September 30, 2018, cash provided by operating activities of \$13.0 million was attributable to a net change of \$39.7 million in our operating assets and liabilities and \$3.8 million in non-cash

charges, partially offset by a net loss of \$30.5 million. The non-cash charges consisted of depreciation and amortization of \$1.1 million, stock-based compensation expense of \$0.6 million, and a change in the fair value of our redeemable convertible preferred stock liability of \$2.1 million. The change in operating assets and liabilities was primarily due to a \$47.6 million increase in deferred revenue associated with the Sanofi Agreement, offset by a \$5.9 million increase in receivable from a related party resulting from the Sanofi Agreement and a \$1.4 million increase in prepaid expenses and other current assets primarily resulting from the timing of prepayments made for research and development activities.

#### Cash used in investing activities

During the years ended December 31, 2018 and 2017, cash used in investing activities of \$1.3 million and \$1.6 million, respectively, was comprised primarily of purchases of property and equipment.

During the nine months ended September 30, 2019, cash used in investing activities of \$110.0 million was primarily comprised of purchases of marketable securities of \$143.7 million and purchases of property and equipment of \$2.1 million, offset by maturities of marketable securities of \$29.6 million and proceeds from the sale of held-for-sale assets of \$6.0 million.

During the nine months ended September 30, 2018, cash used in investing activities of \$1.3 million was comprised of purchases of property and equipment.

#### Cash provided by financing activities

During the year ended December 31, 2018, cash provided by financing activities of \$60.8 million was comprised primarily of \$60.6 million in net cash proceeds received from the issuances of our Series B redeemable convertible preferred stock, \$0.4 million in proceeds from the issuance of common stock upon the exercise of stock options, offset by \$0.1 million in repurchases of early exercised stock options.

During the year ended December 31, 2017, cash provided by financing activities of \$22.7 million was comprised primarily of \$22.6 million in net cash proceeds received from the issuances of our Series A preferred stock, and \$0.1 million in proceeds from the issuance of common stock upon the exercise of stock options.

During the nine months ended September 30, 2019, cash provided by financing activities of \$100.2 million was comprised of \$100.0 million in net cash proceeds received from the issuances of our Series C redeemable convertible preferred stock and \$0.2 million in proceeds from the issuance of common stock upon the exercise of stock options.

During the nine months ended September 30, 2018, cash provided by financing activities of \$56.6 million was comprised of \$56.2 million in net cash proceeds received from the issuances of our Series B redeemable convertible preferred stock and \$0.4 million in proceeds from the issuance of common stock upon the exercise of stock options.

#### **Contractual obligations and commitments**

The following table summarizes our commitments and contractual obligations as of December 31, 2018:

		Payments Due By Period									
		Less than 1						More than			
	Total		year	1-3	3 years	3-	5 years		5 years		
		(in thousands)									
Operating lease obligations	\$15,881	\$	3,557	\$	7,435	\$	4,889	\$	_		
Capital lease obligations	328		157		171		_		_		
Total contractual obligations	\$16,209	\$	3,714	\$	7,606	\$	4,889	\$	_		

Our contractual obligations reflect our minimum payments due for office and laboratory space leases in Redwood City, California and Cambridge, Massachusetts, which are our operating leases, and our equipment leases, which are our capital leases. Our primary Redwood City lease commenced in January 2015 and ends in April 2023. As part of the Warp Drive acquisition, we assumed Warp Drive's office and laboratory space lease in Cambridge, which ends in February 2023. In March 2019, we fully subleased the Cambridge lease to Casma Therapeutics, Inc., or Casma, on financial terms substantially the same as the original lease. The amounts reflected in the table above include our lease payments for the Cambridge lease, but do not reflect any offset for the sublease payments we are entitled to receive from Casma. The sublease by Casma and related sublease payments by Casma to us are fully guaranteed by Third Rock Ventures, LLC.

We enter into agreements in the normal course of business with contract research organizations for clinical trials, contract manufacturing organizations to provide clinical trial materials and with vendors for preclinical studies and other services and products for operating purposes which are generally cancelable at any time by us upon 30 to 90 days prior written notice. These payments are not included in this table of contractual obligations.

#### Off-balance sheet arrangements

We have not entered into any off-balance sheet arrangements, as defined in Item 303 of Regulation S-K.

#### Indemnification agreements

We enter into standard indemnification arrangements in the ordinary course of business. Pursuant to these arrangements, we indemnify, hold harmless and agree to reimburse the indemnified parties for losses suffered or incurred by the indemnified party, in connection with any trade secret, copyright, patent or other intellectual property infringement claim by any third party with respect to its technology. The term of these indemnification agreements is generally perpetual any time after the execution of the agreement. The maximum potential amount of future payments we could be required to make under these arrangements is not determinable. We have never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, we believe the fair value of these agreements is minimal.

#### Qualitative and quantitative disclosures about market risk

#### Interest rate risk

We are exposed to market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities. The primary objective of our investment activities is to preserve capital to fund our operations. We also seek to maximize income from our investments without assuming significant risk. To

achieve our objectives, we maintain a portfolio of investments in a variety of securities of high credit quality and short-term duration, invested in compliance with our policy.

We held cash and cash equivalents of \$69.6 million as of December 31, 2018, which consisted of bank deposits and money market funds. We held cash, cash equivalents and marketable securities of \$136.3 million as of September 30, 2019, which consisted of bank deposits, money market funds, U.S. government debt securities, U.S. government agency bonds, commercial paper and corporate bonds. Such interest-earning instruments carry a degree of interest rate risk; however, historical fluctuations in interest income have not been significant for us. Due to the short-term maturities of our cash equivalents, an immediate one percent change in interest rates would not have a material effect on the fair value of our cash equivalents and marketable securities.

#### Foreign currency risk

Our expenses are generally denominated in U.S. dollars. However, we have entered into a limited number of contracts with vendors for research and development services with payments denominated in foreign currencies, including the Euro, British Pound and Chinese Yuan. We are subject to foreign currency transaction gains or losses on our contracts denominated in foreign currencies. To date, foreign currency transaction gains and losses have not been material to our consolidated financial statements, and we have not had a formal hedging program with respect to foreign currency. A 10% increase or decrease in current exchange rates would not have a material effect on our financial results.

#### Critical accounting policies, significant judgments, and use of estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles, or U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

#### Revenue recognition

Effective January 1, 2018, we adopted Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* (ASC 606) using the full retrospective transition method. We did not have any effective contracts within the scope of this guidance prior to January 1, 2018, and the adoption of ASC 606 had no impact on our consolidated financial statements. Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which such entity expects to receive in exchange for those goods or services. In determining the appropriate amount of revenue to be recognized as we fulfill our obligations under arrangements, we perform the following steps: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract, (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract is determined to be within the scope of ASC 606, we assess the goods or services promised within

each contract and determine those that are performance obligations and assess whether each promised good or service is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

We enter into collaboration agreements under which we may obtain upfront license fees, research and development funding, and development, regulatory and commercial milestone payments and royalty payments. Our performance obligations under these arrangements may include licenses of intellectual property, sales and distribution rights, research and development services, delivery of manufactured product and/or participation on joint steering committees.

Licenses of intellectual property: If the license to the our intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, we recognize revenue from upfront license fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. For licenses that are bundled with other promises, we utilize judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring proportional performance for purposes of recognizing revenue from non-refundable, upfront fees. We evaluate the measure of proportional performance each reporting period and, if necessary, adjust the measure of performance and related revenue recognition.

Research, development and regulatory milestone payments: At the inception of each arrangement that includes research, development, or regulatory milestone payments, we evaluate whether the milestones are considered probable of being reached and estimate the amount to be included in the transaction price. We use the most likely amount method for research, development and regulatory milestone payments. Under the most likely amount method, an entity considers the single most likely amount in a range of possible consideration amounts. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price.

Sales-based milestones and royalties: For arrangements that include sales-based milestone or royalty payments based on the level of sales, and in which the license is deemed to be the predominant item to which the sales-based milestone or royalties relate to, we recognize revenue in the period in which the sales-based milestone is achieved and in the period in which the sales associated with the royalty occur. To date, we have not recognized any sales-based milestone or royalty revenue resulting from our collaboration arrangements.

The transaction price for each collaboration agreement is determined based on the amount of consideration we expect to be entitled for satisfying all performance obligations within the agreement. Significant judgment may be required in determining the amount of variable consideration to be included in the transaction price. We use the most likely amount method to determine variable consideration and will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

Revenue is recognized based on actual costs incurred as a percentage of total estimated costs to be incurred over the performance obligation as we fulfill our performance obligations. A cost-based input method of revenue recognition requires management to make estimates of costs to complete our performance obligations. In making such estimates, significant judgment is required to evaluate assumptions related to cost estimates. The cumulative effect of revisions to estimated costs to fulfill our performance obligations will be recorded in the period in which changes are identified and amounts can be reasonably estimated.

#### **Business combinations**

Accounting for business combinations requires us to make significant estimates and assumptions, especially at the acquisition date with respect to tangible and intangible assets acquired and liabilities assumed and

pre-acquisition contingencies. We use our best estimates and assumptions to accurately assign fair value to the tangible and intangible assets acquired and liabilities assumed at the acquisition date as well as the useful lives of those acquired intangible assets. Examples of critical estimates in valuing certain of the intangible assets we have acquired include but are not limited to developed technologies and in-process research and development. Our estimates may also impact our deferred income tax assets and liabilities. Unanticipated events and circumstances may occur that may affect the accuracy or validity of such assumptions, estimates or actual results.

# Accrued research and development expenses

We record accrued expenses for estimated preclinical study and clinical trial expenses. Estimates are based on the services performed pursuant to contracts with research institutions and contract research organizations and clinical manufacturing organizations that conduct and manage preclinical studies and clinical trials on our behalf based on actual time and expenses incurred by them. Further, we accrue expenses related to clinical trials based on the level of patient enrollment and activity according to the related agreement. We monitor patient enrollment levels and related activity to the extent reasonably possible and make judgments and estimates in determining the accrued balance in each reporting period. If we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates. To date, we have not experienced significant changes in our estimates of preclinical studies and clinical trial accruals.

# Stock-based compensation

We maintain an equity incentive plan as a long-term incentive for employees, consultants and members of our board of directors. The plan allows for the issuance of non-statutory options, or NSOs, incentive stock options to employees and NSOs to nonemployees.

Stock-based compensation is measured using estimated grant date fair value and recognized as compensation expense over the service period in which the awards are expected to vest. We estimate the grant date fair value, and the resulting stock-based compensation, using the Black-Scholes option-pricing model, and we use the straight-line method for expense attribution. The fair-value-based measurements of options granted to nonemployees are remeasured at each period end until the options vest and are amortized to expense as earned. The valuation model used for calculating the estimated fair value of stock awards is the Black-Scholes option-pricing model. The Black-Scholes model requires us to make assumptions and judgments about the variables used in the calculations, including the expected term (weighted-average period of time that the options granted are expected to be outstanding), the expected volatility of our common stock, the related risk-free interest rate and the expected dividend. We have elected to recognize forfeitures of stock-based awards as they occur.

The Black-Scholes option-pricing model requires the use of highly subjective assumptions to determine the fair value of stock-based awards. These assumptions include:

- Expected Term—The expected term represents the weighted-average period the stock options are expected to remain outstanding and is based on the options' vesting terms, contractual terms and industry peers, as we did not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior.
- Expected Volatility—Since we have been privately held and do not have any trading history for our common stock, the expected volatility is estimated based on the average volatility for comparable publicly traded biotechnology companies over a period equal to the expected term of the stock option grants. The comparable companies are chosen based on their similar size, stage in the life cycle or area of specialty.

- Risk-Free Interest Rate—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of the option.
- Expected Dividend—We have never paid dividends on our common stock and have no plans to pay dividends on our common stock. Therefore, we used an expected dividend yield of zero.

# Common stock valuation

Historically, for all periods prior to this initial public offering, the fair values of the shares of common stock underlying our stock-based awards were estimated on each grant date by our board of directors. In order to determine the fair value of our common stock underlying option grants, our board of directors considered, among other things, valuations of our common stock prepared by an unrelated third-party valuation firm in accordance with the guidance provided by the American Institute of Certified Public Accountants Practice Guide, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation.* 

For our valuations performed on or prior to December 31, 2018, we used the discounted cash flow model to estimate the value of equity, and allocated the equity value to the various classes of equity using an option pricing method, or OPM. The OPM uses option theory to value the various classes of a company's securities in light of their respective claims to the enterprise value. For our valuations performed in 2019, we utilized a multi-scenario OPM utilizing two scenarios, an initial public offering, or IPO, scenario and a non-IPO scenario. The IPO scenario value was based on management's estimated IPO valuation and IPO timing, discounted back to the valuation date. The non-IPO scenario per share value was based on the discounted cash flow model to estimate the value of equity, allocating the equity value to the various classes of equity using an OPM. Under a multi-scenario OPM, the per share values calculated under each scenario of the OPM are weighted based on the probability of expected outcomes and the quality of the information specific to each allocation methodology to arrive at a final estimated fair value per share of the common stock before a discount for lack of marketability is applied.

Given the absence of a public trading market for our common stock, our board of directors exercised their judgment and considered a number of objective and subjective factors to determine the best estimate of the fair value of our common stock, including important developments in our operations, valuations performed by an independent third party, sales of preferred stock, actual operating results and financial performance, the conditions in the biotechnology industry and the economy in general, the stock price performance and volatility of comparable public companies, and the lack of liquidity of our common stock, among other factors. After the closing of this offering, our board of directors will determine the fair value of each share of underlying common stock based on the closing price of our common stock as reported on the date of the grant. Our board of directors intends all options granted to be exercisable at a price per share not less than the per share fair value of our common stock underlying those options on the grant date.

# **Emerging growth company status**

In April 2012, the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, was enacted. Section 107 of the JOBS Act provides that an "emerging growth company," or an EGC, can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act of 1933, as amended, or the Securities Act, for complying with new or revised accounting standards. Thus, an EGC can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We early adopted ASC 606 as the JOBS Act does not preclude an EGC from early adopting a new or revised accounting standard earlier than the time that such standard applies to private companies. We have elected to use the extended transition period for any other 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.

# **Recent accounting pronouncements**

See the sections titled "Summary of significant accounting policies—recently issued and adopted accounting Pronouncements" and "Recent accounting pronouncements not yet adopted" in Note 2 to our audited consolidated financial statements and Note 2 to our unaudited condensed consolidated financial statements included elsewhere in this prospectus for additional information.

# **Business**

# Overview

We are a clinical-stage precision oncology company focused on developing novel targeted therapies to inhibit elusive, high-value *frontier* targets within notorious growth and survival pathways, with particular emphasis on the RAS and mTOR signaling pathways. We define *frontier* targets as proteins that play an important role in cancer and for which there is either: (1) no approved drug that directly **inhibits** it, or (2) one or more approved drugs that directly inhibit it but through a mechanism of action that may not enable **suppression of the full range of its biologic contributions to cancer**.

Our understanding of genetic drivers and adaptive resistance mechanisms in cancer, coupled with robust drug discovery and medicinal chemistry capabilities, has guided us to establish a deep pipeline targeting critical signaling nodes within these pathways. This cohesive approach underpins our clinical strategy of exploring mechanism-based dosing paradigms and in-pathway combinations to optimize treatment for cancer patients. Our most advanced product candidate, RMC-4630, is a potent and selective inhibitor of SHP2, based on preclinical evidence described in this prospectus. SHP2 is a central node in the RAS signaling pathway. In collaboration with Sanofi, we are evaluating RMC-4630 in a multi-cohort Phase 1/2 clinical program. This RMC-4630 Phase 1/2 program currently consists of two active clinical trials: RMC-4630-01, a Phase 1 study of RMC-4630 as a single agent, and RMC-4630-02, a Phase 1b/2 study of RMC-4630 in combination with the MEK inhibitor cobimetinib (Cotellic). In this prospectus, we report preliminary data from 63 patients who had enrolled in our Phase 1 study and received RMC-4630 as a monotherapy as of November 6, 2019 and from eight patients who had enrolled in our Phase 1b/2 combination study and received RMC-4630 as of November 14, 2019. Leveraging our proprietary tri-complex technology platform, we are also developing a portfolio of mutant-selective RAS inhibitors that we believe are the first potent, selective, cell-active inhibitors of the active, GTP-bound form of RAS, or RAS(ON). These inhibitors also have exhibited anti-tumor activity in vivo in preclinical models. Initially, we will prioritize four mutant RAS(ON) targets—KRAS<sup>G12C</sup>, KRAS<sup>G12D</sup> and NRAS<sup>G12C</sup>—and expect to nominate our first development candidate in 2020. Our pipeline also includes inhibitors of other key nodes within the RAS and mTOR signaling pathways, such as SOS1 and mTORC1. Our pipeline includes one product candidate that is in clinical development and all of our other programs are in the preclinical stage. We believe our deep, differentiated pipeline and development strategies provide us with the opportunity to pioneer novel treatment regimens to maximize the depth and durability of clinical benefit and circumvent adaptive resistance mechanisms for patients with cancers dependent on these critical pathways.

The RAS and mTOR signaling cascades are among the most frequently exploited by human cancers, where mutations in key nodes in these pathways cause excessive or aberrant signaling and cell growth. For example, mutations in RAS proteins account for approximately 30% of all human cancers in the United States, many of which are fatal. According to the National Cancer Institute, KRAS protein mutations occur in up to 35% of lung, 45% of colon and 95% of pancreatic cancers. Cancers caused by RAS-pathway mutations exhibit a phenomenon called "oncogene addiction," in which tumor cells become highly dependent on signaling through the RAS pathway to survive. The importance of the RAS pathway in cancer has led to the development of several targeted therapies that can profoundly inhibit tumor growth and cause regressions in some instances. However, cancer cells can eventually develop adaptive resistance, losing sensitivity to treatment by hijacking other cell signaling circuitry to circumvent the inhibition and restore RAS-dependent signaling. The need to overcome this resistance in treating RAS-dependent tumors has led to the use of combination regimens designed to inhibit the RAS signaling pathway at multiple nodes simultaneously in an attempt to prolong the depth and durability of clinical benefit.

Despite recent progress in targeted therapies, we believe there is a significant need and opportunity to further improve the treatment of certain cancers. We have built an innovation engine consisting of three complementary drivers that enable us to discover and develop targeted therapies for elusive, high-value *frontier* cancer targets within notorious growth and survival pathways:

- Deep **chemical biology and cancer pharmacology know-how**, including assays and proprietary tool compounds, to define the critical vulnerabilities of "frontier" RAS and mTOR pathway targets and associated signaling circuits in cancer cells;
- Sophisticated structure-based drug discovery capabilities, including proven access to complex chemical space, to create drug
  candidates tailored to unconventional binding sites on elusive cancer targets; and
- Astute precision medicine approach, embracing patient selection and innovative single agent and combination drug regimens, to
  translate our preclinical insights into clinical benefit for patients with genetically-defined cancers that are addicted to these pathways.

Focusing these drivers on a cohesive set of related disease targets provides biological, chemical and translational insights that can be leveraged to maximize the efficiency and effectiveness of our discovery and development efforts. We have built a portfolio of compounds that inhibit select signaling nodes within these pathways, including clinical targets that previously have been difficult or impossible to drug. We believe our current and future product candidates, when used in specialized dosing paradigms and rational in-pathway combinations, will have the potential to promote profound and sustainable clinical benefit, combat adaptive resistance mechanisms and, in some cases, supplant the current standard of care for patients with tumors driven by these pathways.

Our most advanced product candidate, RMC-4630, is a potent and selective inhibitor of SHP2, based on preclinical evidence described in this prospectus. SHP2 is a protein that plays a central role in modulating cell survival and growth by transmitting signals from upstream receptor tyrosine kinases, or RTKs, to RAS. In collaboration with Sanofi, we are evaluating RMC-4630 in a multi-cohort Phase 1/2 clinical program, which includes our ongoing Phase 1 study of RMC-4630 as monotherapy in patients with advanced cancers, including those with tumors harboring genetically defined mutations in the RAS signaling pathway and our ongoing Phase 1b/2 study of RMC-4630 in combination with the MEK inhibitor cobimetinib. Based on our own data, and supported by observations by others, we are evaluating intermittent dosing schedules in our clinical program to allow us to maximize dose intensity in order to achieve the greatest depth of response. We also plan to explore the potential clinical benefit of RMC-4630 in combination with other in-pathway agents such as RTK (initially epidermal growth factor receptor, or EGFR) and KRAS<sup>G12C</sup> inhibitors, as well as in combination with PD-1 inhibitors. In November 2019, we entered into an agreement with Amgen to evaluate the combination of RMC-4630 and Amgen's KRAS<sup>G12C</sup>(OFF) inhibitor AMG 510 in a Phase 1b trial that will be conducted by Amgen. Although we are at an early stage of clinical testing and product candidate development, we believe RMC-4630 is well-positioned to become the backbone of targeted therapy combinations for the treatment of various RAS-dependent tumors. Under our collaboration with Sanofi on our SHP2 program, we have a 50-50 profit share and a co-promote right in the United States and are eligible to receive royalties on net sales outside of the United States. Sanofi is responsible for reimbursing substantially all of our research costs and all of our development costs for the SHP2 program.

We are also developing a portfolio of what we believe to be the first potent, selective and cell-active inhibitors of mutant RAS(ON) proteins. Historically, direct inhibition of any RAS protein has been challenging due to a lack of tractable, or "druggable," binding pockets. Recently, selective inhibitors of inactive, GDP-bound forms of RAS, or RAS(OFF), have demonstrated encouraging preliminary anti-tumor effects and thus provide clinical validation for targeting mutant RAS in cancer. Our small molecule inhibitors of mutant RAS(ON) are derived from our proprietary tri-complex technology platform, which enables us to target proteins lacking intrinsic drug binding sites by inducing new druggable pockets. Initially, we will prioritize four mutant RAS(ON)

targets—KRAS<sup>G12C</sup>, KRAS<sup>G12C</sup> and NRAS<sup>G12C</sup>—and expect to nominate our first development candidate in 2020. We plan to evaluate our RAS(ON) inhibitors alone and in combination with other drugs and investigational new drugs, particularly in-pathway agents. We believe that targeted inhibition of various oncogenic RAS(ON) mutants represents a highly differentiated approach for treating the large population of patients with diverse RAS mutations, including non-small cell lung cancer, or NSCLC, colorectal, pancreatic and other cancers.

We have two preclinical programs targeting other key nodes in the RAS and mTOR signaling pathways. Our program targeting SOS1, a protein that plays a key role in converting RAS(OFF) to RAS(ON) in cells, is currently in lead generation stage. In addition, our preclinical development candidate, RMC-5552, is designed to selectively and deeply inhibit mTORC1, thereby preventing phosphorylation and inactivation of 4EBP1, a downstream protein in the mTOR signaling pathway that normally suppresses expression of certain oncogenes such as C-MYC. We advanced RMC-5552 into IND-enabling development in June 2019.

Our management team has significant experience in oncology and in progressing products from early stage research to clinical trials, and ultimately to regulatory approval and commercialization. Dr. Steve Kelsey, our President of Research and Development, was previously President of Onkaido Therapeutics, a Moderna venture focused on oncology mRNA therapeutics, and has held senior positions at Medivation, Geron and Genentech, where he played a significant role in the development of Perjeta, Kadcyla and Erivedge. Our President and Chief Executive Officer, Dr. Mark Goldsmith, served as Chief Executive Officer of Constellation Pharmaceuticals, where he led the creation of its oncology pipeline and drove the development of a strategic alliance with Genentech. He also has led four other companies spanning early discovery through development, including Global Blood Therapeutics, where he led the discovery and early development of voxelotor. We are also supported by a leading syndicate of investors, which include our founding investor, Third Rock Ventures, and BVF, Casdin Capital, Cormorant, Deerfield, Fidelity, Nextech, Tavistock, The Column Group and Vivo Ventures.

Our company was founded and continues to be supported by three world-class scientific advisors: Dr. Kevan Shokat (Professor and Chair of the Department of Cellular and Molecular Pharmacology at University of California, San Francisco, Professor of Chemistry at the University of California, Berkeley and an investigator at the Howard Hughes Medical Institute), Dr. Martin Burke (Professor of Chemistry at the University of Illinois at Urbana-Champaign) and Dr. Michael Fischbach (Associate Professor in the Department of Bioengineering at Stanford University and a Stanford ChEM-H Institute Scholar). Dr. Shokat is widely recognized for his seminal contributions to the field of kinase biology, using chemistry, protein engineering and genetic tools to pioneer novel therapeutic approaches to target key signaling pathways in cancer. He led the discovery of the first KRAS<sup>G12C</sup>(OFF) inhibitor.

# Our strategy

Our goal is to develop novel targeted therapies to outsmart cancer for the benefit of patients. We plan to pursue the following strategies:

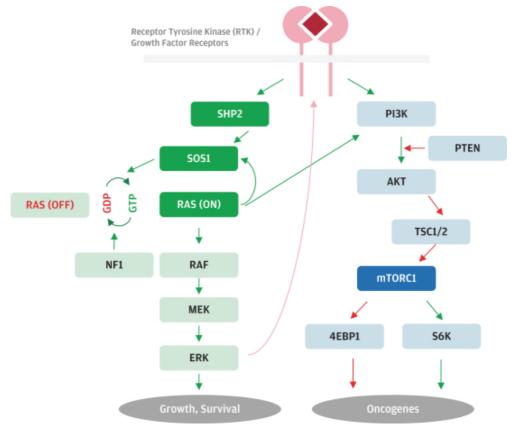
- Deploy our innovation engine against frontier oncology targets. We use our chemical biology and cancer pharmacology know-how, structure-based drug discovery capabilities, and precision medicine approach to discover and develop compounds designed to overcome the complex molecular circuitry of cancer. We focus on a cohesive set of genetically-defined targets in the RAS signaling pathway to create compounds that may be used alone and in combination with other targeted therapies. We evaluate in-pathway proprietary mechanism-based combination therapies and innovative dosing paradigms. Collectively, these are designed to maximize the depth and durability of clinical benefit and improve the lives of patients with cancer.
- Establish our proprietary SHP2 inhibitor, RMC-4630, as the backbone of targeted therapy combinations for the treatment of RAS-dependent tumors. As SHP2 is a convergent node within the oncogenic RAS-signaling

pathway, we plan to evaluate RMC-4630 in combination with other in-pathway agents targeting RTK (initially EGFR), and KRAS<sup>G12C</sup>. We have initiated a Phase 1b/2 trial of RMC-4630 with cobimetinib (a MEK inhibitor) and we plan to evaluate RMC-4630 in combination with osimertinib (an EGFR inhibitor). We also intend to study RMC-4630 in combination with Amgen's AMG 510, a KRAS<sup>G12C</sup>(OFF) inhibitor, in a Phase 1b trial that will be conducted by Amgen and subsequently in combination with our proprietary KRAS<sup>G12C</sup>(ON) inhibitor once a clinical candidate has been selected for development. As many patients with tumors carrying mutations that are potentially SHP2-dependent are currently treated with immune checkpoint inhibitors, we also plan to study RMC-4630 in combination with a PD-1 inhibitor.

- Pioneer mutant selective RAS(ON) inhibition across multiple genetically defined cancers. There are dozens of RAS mutants that have been implicated as molecular drivers of cancer. We are developing a pipeline of small molecules targeting multiple oncogenic forms of RAS(ON) that are derived from our proprietary tri-complex technology platform. Initially, we will prioritize four mutant RAS(ON) targets—KRAS<sup>G12C</sup>, KRAS<sup>G13C</sup>, KRAS<sup>G12D</sup> and NRAS<sup>G12C</sup>—and expect to nominate our first development candidate in 2020. We plan to evaluate our RAS(ON) inhibitors alone and in combination with other drugs and investigational new drugs, particularly in-pathway agents. We believe that targeted inhibition of various oncogenic RAS(ON) mutants represents a highly differentiated approach for treating the large population of patients with diverse RAS mutations, including NSCLC, colorectal, pancreatic and other cancers.
- Maximize the global value of our programs by continuing to execute synergistic and value-creating transactions. We have the
  organizational capabilities and resources to enable us to continue to complete value-creating transactions, such as our collaboration with
  Sanofi on SHP2 and our acquisition of Warp Drive. In the future, we may enter into other collaborations where we believe there is an
  opportunity to accelerate the development and commercialization of our product candidates while allowing us to retain meaningful rights in
  major markets. We may also seek to acquire or in-license product candidates or technologies opportunistically that are synergistic with our
  drug discovery and development efforts.
- Maintain our culture of tireless commitment to patients. As we grow our business, we will continue to apply transformative science in the development of novel targeted therapies for patients suffering from cancers with limited therapeutic options. To accomplish this, we intend to continue building our team of qualified individuals who share our commitment to collaboration and scientific rigor in the development of novel therapies to outsmart cancer and improve the lives of patients.

# Our opportunity: unmet needs in cancers with driver mutations in notorious growth and survival pathways Background

The RAS and mTOR signaling cascades are among the most frequently exploited by human cancers. Cancer cells often carry mutations in proteins in these pathways that subvert normal cell growth and survival by causing excessive or aberrant signal transduction. These proteins can be directly or indirectly involved in signal transduction. For example, many tumors of different types exhibit excessive activation of the RAS signaling cascade as a result of mutations in RTKs, RAS, NF1 and/or RAF.



We have built a portfolio of compounds that inhibit select signaling nodes within the RAS and mTOR pathways. To date, our discovery and development efforts have focused on SHP2, RAS, SOS1 and mTORC1 (these targets are shaded dark green or blue in the figure above).

# SHP2

SHP2 is a protein tyrosine phosphatase that plays a critical role in the transduction of intracellular signals downstream of a wide variety of RTK growth factor receptors to promote cell survival and growth. SHP2 acts as a central signaling node that regulates growth signals within normal cells and, in certain circumstances, cancer cells. Some mutant forms of RAS, such as KRAS<sup>G12C</sup> and KRAS<sup>G12A</sup>, exert their oncogenic effects by amplifying or exaggerating normal RTK-mediated growth signals transmitted via SHP2, and as a result they can be

suppressed by inhibiting SHP2. There are other cancer-causing mutations that result in, or are dependent upon, activation of wild-type RAS and are likewise dependent on SHP2, including amplification of wild-type RAS or mutations in the gene encoding the GTPase-activating protein (GAP) neurofibromin 1 (NF1) which reduce activity of NF1 (so called NF1 loss-of-function or NF1<sup>LOF</sup>), and class 3 mutations in the downstream effector BRAF (BRAF<sup>Class3</sup>).

# RAS

RAS proteins drive normal cell proliferation, differentiation and survival in response to growth factors acting through RTKs, and they can also be direct drivers of cancer. Normally RAS proteins cycle between an inactive form (RAS(OFF)), which is bound to GDP and unable to transmit signals, and an active conformation (RAS(ON)), which is induced upon binding GTP in response to growth factor receptor stimulation, causing it to become competent to interact physically with downstream effector proteins such as RAF. The magnitude of cell signals transmitted by the RAS activation cycle is proportional to the intracellular level of RAS(ON). In a healthy, normal cell RAS(ON) represents a small fraction of the total RAS pool within a cell. Signals arising from RTKs upstream of the RAS cycle act through SHP2 to promote the substitution of GTP for GDP in association with RAS, thereby increasing RAS(ON) levels. In cancers with abnormally elevated RTK activity, increased signaling via the RAS activation cycle is a major driver of tumor cell growth. Likewise, oncogenic mutations of RAS itself result in a significant slowing of the enzymatic conversion of RAS-bound GTP to GDP and thus drive cancer by raising RAS(ON) significantly above normal levels. In some cells harboring a KRAS<sup>G12C</sup> mutation, 80% or more of cellular KRAS<sup>G12C</sup> is in the GTP-bound state (RAS(ON)), representing a >15-fold increase compared to wild-type KRAS. As a general principle, RAS-dependent cancer cells exploit a high level of RAS(ON) for continued survival and growth.

# SOS1

SOS1 is a member of a family of proteins that activate RAS. SOS1 directly activates RAS proteins by promoting the release of tightly bound GDP and facilitating the binding of GTP, which is present at a much higher intracellular concentrations than GDP, to generate RAS(ON). SOS1 itself is activated by RAS through the binding of RAS(ON) to an allosteric site on the SOS1 protein. As a result, there is a positive feedback loop between SOS1 and RAS that increases RAS signaling. The activation of RAS by SOS1 is 'processive'; that is, once a single molecule of SOS1 is activated it can sequentially activate multiple RAS molecules until it eventually becomes inactive.

### 4EBP1/mTORC1

mTORC1 and mTORC2 are large protein complexes that share mTOR kinase but contain distinct additional components and cellular functions. mTORC1 is a critical regulator of metabolism, growth and proliferation within cells, including cancer cells. Two of the main substrates of mTORC1 are eukaryotic initiation factor 4E-binding protein 1 (4EBP1) and ribosomal S6 kinase (S6K). Under resting conditions non-phosphorylated 4EBP1 functions as a suppressor of the translation of proteins that are required for cell growth, proliferation and survival. Phosphorylation of 4EBP1 by activated mTORC1 inhibits this suppressive regulatory function and thereby upregulates translation of these proteins. One of the most important proteins regulated by 4EBP1 is the oncogenic protein C-MYC, which for many years has been thought to be central to cancer cell growth and survival. The abnormal activation of mTORC1, and subsequent inactivation of the tumor suppressor 4EBP1, is a mechanism that is frequently harnessed by cancer cells to gain a growth and proliferation advantage over normal cells. A number of upstream proteins in the mTOR signaling pathway that regulate mTORC1 activity are frequently mutated, or deleted, in cancer cells, resulting in increased activation of mTORC1 and upregulation of translation; these targets of mutation include PTEN, PI3 kinase (PI3K) and hamartin (TSC1) and tuberin (TSC2).

# RAS mutant epidemiology in the United States

Mutations in RAS proteins account for approximately 30% of all human cancers in the United States, many of which are fatal. Diverse oncogenic RAS mutations in three different RAS isoforms (KRAS, NRAS and HRAS) drive distinct human cancers. KRAS mutations are commonly found in NSCLC and account for approximately 85% of RAS-mutant cancers. NRAS mutations are commonly found in melanoma and account for approximately 11% of RAS-mutant cancers. HRAS mutations are commonly found in bladder cancer and account for 4% of RAS-mutant cancers. The table below summarizes the frequency of RAS cancer mutations in the United States. There continues to be a high unmet medical need for patients bearing tumors with these mutations. We believe our programs, including our SHP2, RAS and SOS1 inhibitors, may be useful in addressing this unmet medical need.

Projected number of new cases in 2019 in the United States (frequency % shown in parentheses below)

Histotype	Projected total new cases in 2019 <sup>1</sup>	KRAS G12C‡	KRAS G12D‡	KRAS G13C‡	KRAS G12A‡	NRAS G12C <sup>‡</sup>	NF1 (LOF)‡	BRAF Class3‡	KRAS Amp <sup>‡</sup>
NSCLC* all	194,000	21,340 (11)	7,760 (4)	1,940 (1)	3,880 (2)	-	11,640 (6)	1,940 (1)	7,760 (4)
NSCLC adeno only*	91,000	12,740 (14)	4,550 (5)	910 (1)	2,730 (3)		4,550 (5)	910 (1)	2,730 (3)
Colorectal	145,000	5,800 (4)	21,750 (15)	435 (0.3)	2,900 (2)	290 (0.2)	4,350 (3)	1,450 (1)	1,450 (1)
Pancreatic	56,000	1,120 (2)	19,600 (35)	56 (0.1)	280 (0.5)	1	560 (1)	168 (0.3)	1,680 (3)
AML*	21,000	84 (0.4)	210 (1)		210 (1)	210 (1)	630 (3)	42 (0.2)	21 (0.1)
Others	Uterine: 61k Melanoma: 96k	Uterine 610 (1)	Uterine 1,830 (3)	Uterine 244 (0.4)	Uterine 1,220 (2)	Melanoma 192 (0.2)	Melanoma 12,480 (13)	Melanoma 2,880 (3)	Uterine 1,830 (3)

- (\*) NSCLC = Non-small cell lung cancer; Adeno = adenocarcinoma; AML = Acute myeloid leukemia.
- (†) Data are based on projections from the National Cancer Institute's SEER Program for new cases of lung cancer, colorectal cancer, pancreatic cancer, AML and other cancers in 2019 and estimates from the American Cancer Society of the incidence of NSCLC and adenocarcinoma in lung cancer cases.
- (‡) Reflects our estimate of projected number of cases in 2019 by RAS protein mutation for each cancer histotype indicated. Estimated frequency percentages (shown in parentheses) of RAS protein mutation in applicable histotype are based on data obtained from Foundation Medicine, Inc., applied to data described in footnote † above.

# Limitations of approved drugs treating RAS-dependent cancers and our opportunity

A major goal in contemporary oncology treatment is to replace relatively unselective chemotherapy regimens—which in many cases remain the standard of care today but provide only partial benefit with many side effects—with more effective and better tolerated targeted therapeutic options. Targeted therapies directed against RAS-dependent cancers, which include drugs that inhibit RTKs, RAF and MEK, have been approved for use in lung cancer, melanoma and colorectal cancer. These targeted therapies have shown the capacity to drive deeper and more durable responses than conventional chemotherapy regimens while minimizing unwanted side effects and damage to normal tissues.

Two treatment gaps remain in RAS-dependent cancers. First, several oncogenic proteins are not addressed by current targeted therapies. Second, cancers driven by oncogenic proteins that are addressed by current targeted therapies often progress in the face of drug therapy due to adaptive resistance mechanisms.

Specific examples of *frontier* cancer drivers are RAS, NF1, and selected RAF mutants (BRAF<sup>Class3</sup>). Historically, direct inhibition of any RAS protein has been challenging due to a lack of tractable, or "druggable," binding pockets. Recently reported initial clinical results from two RAS(OFF) inhibitors targeting mutant KRAS<sup>G12C</sup> suggest significant clinical benefit and provide strong pharmacologic validation of this oncoprotein as a cancer

driver. These results, along with other preclinical data, provide a compelling basis for our commitment to targeting oncogenic mutant forms of RAS(ON). We are using our innovation engine to develop a portfolio of mutant-selective RAS(ON) inhibitors and, initially, we will prioritize four mutant RAS(ON) targets—KRAS<sup>G12C</sup>, KRAS<sup>G13C</sup>, KRAS<sup>G12D</sup> and NRAS<sup>G12C</sup>.

A common source of treatment failure with existing targeted therapies is that cancer cells exhibiting "oncogene addiction" exploit cell signaling circuitry to bypass the drug's effect and sustain growth and survival. This phenomenon is particularly well recognized in RAS-dependent cancers, and may be especially active in certain tumor histotypes, making them less sensitive to a drug from the outset and/or more likely to progress over time. Certain RAS-dependent cancers have been treated with two RAS pathway targeted agents to achieve combinatorial benefit by attenuating adaptive resistance mechanisms. For example, melanomas driven by BRAF<sup>Class1</sup> mutations can be treated with a combination of a BRAF inhibitor and a MEK inhibitor. SHP2 is believed to be a central node that can be targeted to disrupt bypass signaling pathways that may involve activation of multiple RTKs. Therefore, although we are at an early stage of clinical testing and product candidate development, we believe RMC-4630, a potent and selective inhibitor of SHP2, is well positioned to become the backbone of targeted therapy combinations for the treatment of various RAS-dependent tumors, and plan to explore this paradigm in our ongoing RMC-4630 clinical program.

We are using our innovation engine to develop novel targeted therapies and combination regimens to address these treatment gaps.

# Our innovation engine

We have built an innovation engine that enables us to discover and develop novel targeted therapies for elusive high-value *frontier* cancer targets with particular focus on a cohesive set of disease targets within notorious growth and survival pathways. This engine consists of three complementary drivers:

- Deep **chemical biology and cancer pharmacology know-how**, including assays and proprietary tool compounds, to define the critical vulnerabilities of "frontier" RAS and mTOR pathway targets and associated signaling circuits in cancer cells;
- Sophisticated **structure-based drug discovery capabilities**, including proven **access to complex chemical space**, to create drug candidates tailored to unconventional binding sites on elusive cancer targets; and
- Astute **precision medicine approach**, embracing patient selection and innovative single agent and combination drug regimens, to translate our preclinical insights into clinical benefit for patients with genetically-defined cancers that are addicted to these pathways.

# Our chemical biology and cancer pharmacology know-how

We test our inhibitors across a diverse set of human cancer cell and patient-derived *in vitro* and/or *in vivo* models of cancer. This is complemented by targeted implementation of bioinformatics and functional genomics. The biological insights we generate help us to unravel the complex molecular circuitry in human cancers. We also explore mechanisms of adaptive resistance that RAS-addicted cancer cells use to circumvent inhibition of the pathway, and develop innovative mechanism-based dosing paradigms and rational in-pathway combinations with our proprietary compounds and/or other agents. We evaluate such dosing and combination approaches in our preclinical *in vitro* and *in vivo* models to define their pharmacologic opportunities and limitations, and to prioritize therapeutic strategies for translation to the clinic.

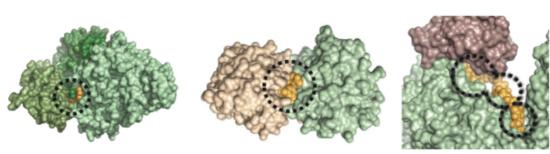
# Our structure-based drug discovery capabilities

We enlist various technologies and capabilities that give us chemical access to challenging sites that are generally not accessible using conventional small molecule drug discovery approaches. For each target, we consider the specific structural, physico-chemical, functional and dynamic properties of the target and deploy the approach(es) that appears most likely to yield viable development candidates. In some instances the compounds we discover and develop are small molecules (e.g., less than 500 mw) with properties that generally satisfy conventional pharmaceutical "Rule of 5" criteria, while in other cases, they are larger (e.g., 500-1000 mw) "Beyond Rule of 5" compounds. In either case, we use various structure-based design tools to discover the initial chemical matter, drive optimization using iterative medicinal chemistry, and generate structure-activity and structure-property relationships to identify development candidates. In order to prosecute effective medicinal chemistry campaigns within complex chemical space, we use our deep experience and make the necessary investments to design and develop scalable modular chemical synthesis, purification and analytical methods for selected scaffolds to routinely and efficiently analogue our "Beyond Rule of 5" chemical series.

Although we are at an early stage of clinical testing and product candidate development, we believe our differentiated chemical approaches to discovering inhibitors for challenging *frontier* cancer targets is exemplified by our current portfolio. Each of our current programs takes advantage of allosteric regulation to inhibit the target of interest by exploiting one or more of three distinct mechanisms. We use the term allosteric inhibitors to describe those that "act at a distance," meaning that the inhibitory effect occurs at a protein site or domain distinct from the compound's binding site.

- i) Intra-Molecular Allosteric Inhibitors: Our SHP2 inhibitors, including RMC-4630, act by binding to a site in the protein that is distinct from the catalytic "active site" but nonetheless inhibit the phosphatase activity of SHP2. The inhibitors bind to a pocket within SHP2 that is formed when the protein is folded back onto itself in its basal, "autoinhibited" state; by binding to this pocket, these compounds stabilize the inactive conformation of SHP2 and therefore inhibit its overall function. We refer to this mechanism as "intra-molecular allostery" since it involves inhibitory actions entirely within the target protein itself. RMC-4630 is a traditional "Rule of 5" compound.
- ii) **Tri-Complex Inhibitors**: Our targeted mutant RAS(ON) portfolio takes advantage of our proprietary tri-complex technology that enables us to discover small molecule inhibitors of targets lacking intrinsic drug binding sites by inducing new druggable pockets. Our RAS inhibitors induce a new binding pocket on RAS(ON) by driving formation of a high affinity ternary complex (tri-complex) between the mutant RAS protein and a widely expressed cytosolic protein called a chaperone (e.g., FKPB12 or cyclophilin A). The inhibitory effect on RAS is mediated by steric occlusion of the interaction site between the mutant RAS and downstream effector molecules, such as RAF, which are required for propagating the oncogenic signal. We refer to this mechanism as "inter-molecular allostery" since it involves indirect inhibitory effects of a second protein (the chaperone) on the target in the presence of our tri-complex inhibitors. Our RAS(ON) inhibitors, which are inspired by natural products that act through this type of mechanism, are "Beyond Rule of 5" compounds.
- Bi-Steric Inhibitors: Our mTORC1 inhibitors comprise two pharmacophores in a single compound. One pharmacophore binds to the well-known FRB (FKBP12-rapamycin binding) site on mTORC1 and the other binds to the mTOR kinase active site. As a result of these two binding interactions, such compounds exhibit two biologically useful features: (1) selectivity for mTORC1 over mTORC2, which is characteristic of the natural compound rapamycin, and (2) deep inhibition of mTORC1, which is characteristic of known active site inhibitors. These properties enable selective inhibition of phosphorylation of mTORC1 substrates, including 4EBP1. We refer to this type of inhibition as a "bi-steric mode." These mTORC1 inhibitors, which are inspired by natural products, are "Beyond Rule of 5" compounds.

SHP2: Intra-Molecular Allosteric RAS: Tri-Complex mTORC1: Bi-Steric

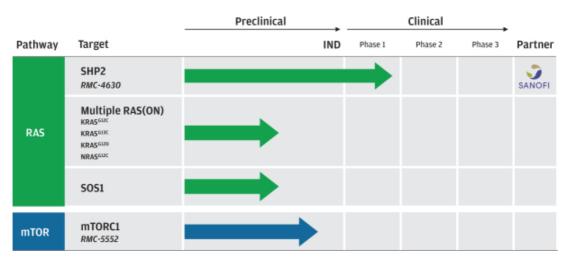


# Our precision medicine approach

We interrogate the biology of different cancers and their associated mutational drivers to help inform patient selection, therapeutic treatment regimens, and appropriate outcome measures. To identify patient subsets that may benefit most from our treatment strategies, we use genomics, transcriptomics and proteomics data from human tumor samples and/or broad panels of human cancer cell lines. We also pursue development of drug combinations where combinatorial benefits are predicted and confirmed in preclinical models. Innovative, mechanism-based dosing paradigms are explored for each combination and refined using pharmacokinetic and pharmacodynamic modeling techniques and sophisticated continuous reassessment dosing methodology. We also identify and monitor pharmacodynamic biomarkers and surrogates of clinical activity to help measure target inhibition.

# Our pipeline

We are using our innovation engine to develop a deep pipeline of novel targeted therapies to inhibit elusive, high-value *frontier* targets within the notorious RAS and mTOR signaling pathways. Our pipeline includes one product candidate that is in clinical development and all of our other programs are in the preclinical stage. Under our collaboration with Sanofi on our SHP2 program, we have a 50-50 profit share and a co-promote right in the United States and are eligible to receive royalties on net sales outside of the United States. Sanofi is responsible for reimbursing substantially all of our research costs and all of our development costs for the SHP2 program. For all other programs, we retain worldwide commercial rights.



# Our SHP2 inhibitor, RMC-4630

# Overview

Our most advanced product candidate, RMC-4630, is a potent and selective inhibitor of SHP2, based on preclinical evidence described in this prospectus. SHP2 is a protein that plays a central role in modulating cell survival and growth by transmitting signals from upstream RTKs to RAS. In collaboration with Sanofi, we are evaluating RMC-4630 in a multi-cohort Phase 1/2 clinical program, which includes our ongoing Phase 1 study of RMC-4630 as monotherapy in patients with advanced cancers, including those with tumors harboring genetically defined mutations in the RAS signaling pathway, and our ongoing Phase 1b/2 study of RMC-4630 in combination with the MEK inhibitor cobimetinib. Based on our own data, and supported by observations by others, we are evaluating intermittent dosing schedules in our clinical program to allow us to maximize dose intensity in order to achieve the greatest depth of response. We also plan to explore the potential clinical benefit of RMC-4630 in combination with other in-pathway agents targeting RTK (initially EGFR), and KRAS<sup>G12C</sup>, as well as in combination with PD-1 inhibitors. Although we are at an early stage of clinical testing and product candidate development, we believe RMC-4630 is well-positioned to become the backbone of targeted therapy combinations for the treatment of various RAS-dependent tumors.

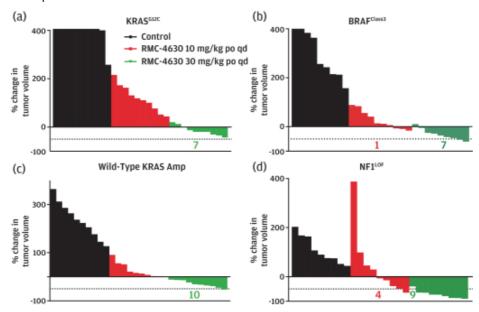
# Preclinical profile of RMC-4630

RMC-4630 potently inhibits SHP2 phosphatase activity in a biochemical assay that monitored dephosphorylation of a probe substrate (IC $_{50}$  1.29 nM, range 0.9 nM to 2.2 nM, number of experiments = 13) and SHP2 function in cellular assays, as measured by inhibition of ERK1/2 phosphorylation at Thr202/Tyr204, a read out for RAS pathway activation (IC $_{50}$  values of 14 nM in PC9<sup>EGFRex19del</sup> cells, range 5.3 nM to 63 nM, number of experiments = 11; and 20 nM in NCI-H358 KRAS<sup>G12C</sup> cells, range 14.5 nM to 27.5 nM, number of experiments = 4). In standard *in vitro* assays of target selectivity, no significant interaction with kinases or other phosphatases was observed. RMC-4630 (up to a test concentration of 10  $\mu$ M) exhibited no inhibition of full length SHP1 phosphatase (number of experiments = 3), or the catalytic domains of SHP1 and thirteen other phosphatase enzymes (single experiment conducted in duplicate). RMC-4630 exhibited over 3,000-fold (range 7054 to >19,000, single experiment conducted in duplicate) selectivity for SHP2 (as measured by biochemical potency) over a panel of over 450 kinases (as measured by displacement of probe binding).

# Preclinical anti-tumor activity

Consistent with the role of SHP2 as a regulator of the RAS cycle, we observed that RMC-4630 suppresses tumor growth in a dose-dependent manner in human cell-line or patient-derived preclinical xenograft models of tumors harboring KRAS<sup>G12C</sup>, NF1<sup>LOF</sup>, or BRAF<sup>Class3</sup> mutations or wild-type KRAS amplifications (Figure 1). Moreover, RMC-4630 at 30 mg/kg daily administered orally induced regression in some tumor models.

**Figure 1**: RMC-4630 suppresses tumor growth in preclinical xenograft models of tumors harboring KRAS<sup>G12C</sup>, NF1<sup>LOF</sup>, or BRAF<sup>Class3</sup> mutations or wild-type KRAS amplifications.

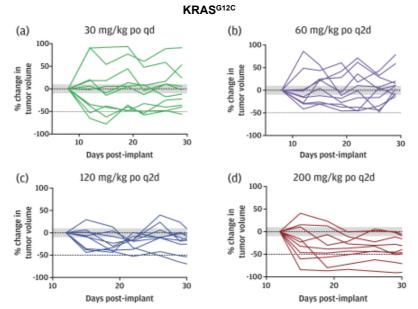


Daily oral administration (po qd) of RMC-4630 at 10 mg/kg (red) or 30 mg/kg (green) produces a dose-dependent inhibition of tumor growth in multiple solid human tumor cell line-derived or patient-derived xenograft (CDX or PDX, respectively) models bearing RAS pathway activating mutations of interest. All human xenograft models implanted in immune-deficient mice: (a) non-small cell lung cancer (NSCLC) PDX LUN#092 KRASG12C, (b) NSCLC BRAFClass 3 PDX LUN#023 (BRAFD594N), (c) gastric cancer PDX STO#332 wild-type KRAS amplification (KRAS Amp, copy number, CN = 4) and (d) NSCLC CDX NCI-H1838 NF1<sup>LOF</sup> (NF1<sup>1184fs</sup>). Control animals are shown in black. Data represent waterfall plots of individual end of study tumor responses, with tumor volume expressed as a percentage of initial tumor volume at time of study start (truncated at 400%). Each animal is represented as a separate bar (number of mice per group = 9 to 10). Numbers indicate number of regressions (defined as > 10% reduction in tumor volume from starting volume) in each group. Dotted line references 50% reduction in tumor volume. The duration of treatment with RMC-4630 or vehicle control was within a range of 30 days to 50 days across the four models.

# Optimizing dosing and scheduling

Using an intermittent dosing schedule, which permits deep but discontinuous inhibition of the SHP2 target, significantly higher doses of RMC-4630 were tolerated than could be delivered with daily dosing. These higher doses of RMC-4630 led to increased tumor growth inhibition and resulted in more frequent and deeper tumor regressions (Figure 2).

**Figure 2**: Intermittent dose regimens of RMC-4630 produce deeper and more frequent tumor regressions than daily dosing at maximal tolerated dose in a preclinical xenograft model of NSCLC tumors harboring KRAS<sup>G12C</sup> mutations.



Anti-tumor activity of daily (qd) and intermittent, every other day, (q2d) oral (po) dose regimens for RMC-4630 in NSCLC NCI-H358 KRAS<sup>G12C</sup> cell line-derived xenograft model in mice. Graphs show tumor volume data for individual animals, expressed as a percentage of initial tumor volume at time of study start, for (a) 30 mg/kg q2d, (b) 60 mg/kg q2d, (c) 120 mg/kg q2d and (d) 200 mg/kg q2d dose regimens (number of animals per group = 9 to 10). Changes in tumor volume of greater than 10% (grey zone) are considered significant. Dotted line references 50% reduction in tumor volume. All dose regimens were well-tolerated.

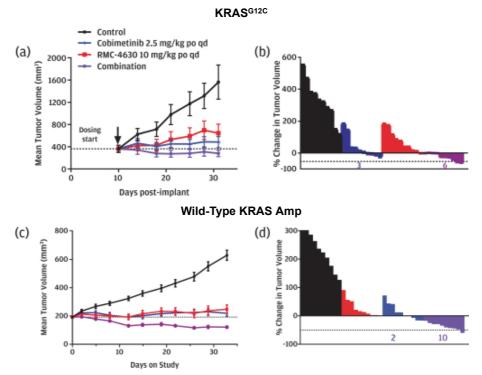
# Rationale for combining with other targeted agents

Certain cancer treatments that inhibit components of the RAS signaling pathway are often unable to achieve the desired clinical effect as single agents due to the rapid development of adaptive resistance. These resistance mechanisms often involve hyperactivation of various RTKs that drive oncogenic signals via SHP2. Given that SHP2 is required for RAS signaling pathway activation by many RTKs, it might represent a viable target to limit potential resistance to other single-agent treatments. Inhibition of SHP2 in cell culture experiments abrogated RTK signaling and, in preclinical studies, RMC-4630 demonstrated combinatorial activity when given with other RAS signaling pathway inhibitors, such as MEK, KRAS<sup>G12C</sup> or EGFR.

MEK inhibitors, such as cobimetinib, are approved for the treatment of certain types of melanoma but only in combination therapy. As single agents they have shown limited clinical effect, particularly in lung cancers carrying RAS mutations, which is believed to be due in part to adaptive resistance mechanisms.

In several preclinical tumor xenograft models either RMC-4630 or cobimetinib, dosed as single agents at doses lower than the maximally tolerated dose for each agent, inhibited tumor growth but induced few tumor regressions. However, the number and depth of tumor regressions was markedly increased upon treatment with a combination of these low-doses of RMC-4630 and cobimetinib (Figure 3).

**Figure 3**: Combination benefit for RMC-4630 and cobimetinib in preclinical xenograft models of tumors harboring KRAS<sup>G12C</sup> mutations or wild-type KRAS amplifications.



Anti-tumor activity of RMC-4630 (10 mg/kg, red) and cobimetinib (2.5 mg/kg, blue) dosed daily by oral administration (po, qd) as single agents or in combination (purple) in (a and b) NSCLC CDX NCI-H358 KRAS<sup>G12C</sup> and (c and d) gastric cancer PDX STO#332 wild-type KRAS amplification (KRAS Amp, CN = 4) xenograft models in mice. Data represent (a and c) mean tumor volume over time or (b and d) waterfall plots of individual end of study responses with tumor volume expressed as a percentage of initial tumor volume at time of study start (truncated at 300% in d). In (a) and (c) data represent mean and errors bars represent standard error of the mean. Each animal represented as a separate bar in (b and d). Number of animals per group = 10. Respective doses (in parentheses) of RMC-4630 (10 mg/kg) and cobimetinib (2.5 mg/kg) are lower than the corresponding maximally-tolerated dose for each agent. Numbers indicate number of regressions (defined as > 10% reduction in tumor volume from starting volume) in each group.

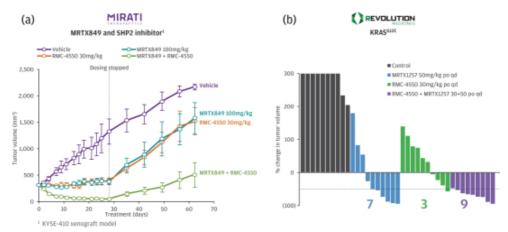
There are three important implications of these observations: first, the anti-tumor effects of RMC-4630 may be significantly greater in human cancers that are already predicted to be sensitive to SHP2 inhibition if RMC-4630 is combined with a MEK inhibitor. Second, the effects of the combination may be observed at doses or exposures of RMC-4630 or a MEK inhibitor that are significantly below the maximum tolerated dose for each agent. Third, there may be a higher probability of invoking tumor cell death with the combination, and thus seeing tumor regressions.

In addition, two of our academic collaborators have demonstrated that tumors with KRAS<sup>G12D</sup> or KRAS<sup>G13D</sup> mutations may be responsive to a SHP2 inhibitor combined with a MEK inhibitor. Based on their published results, the RMC-4630 and MEK inhibitor combination may be active in some tumors with mutations that may not be sensitive to SHP2 inhibition alone.

The combination of RMC-4630 and cobimetinib has been relatively well tolerated in preclinical studies. We have also sought to maximize potent anti-tumor activity of RMC-4630, and reduce potential side effects, by deploying an intermittent dosing schedule.

Recently reported initial clinical results from two KRAS<sup>G12C</sup>(OFF) inhibitors suggest significant clinical benefit and provide strong pharmacologic validation of this oncoprotein as a cancer driver. Preclinical studies have demonstrated that KRAS<sup>G12C</sup>(OFF) inhibitors also cause a rapid increase in signaling through RTKs that are typically SHP2-dependent. Thus, the magnitude and durability of effect of an inhibitor of KRAS<sup>G12C</sup>(OFF) may be significantly increased when combined with a SHP2 inhibitor that disrupts signaling from the activated RTKs. Recent data have demonstrated that a combination of our proprietary SHP2 inhibitor with KRAS<sup>G12C</sup>(OFF) inhibitors can drive significant tumor regression in two distinct KRAS<sup>G12C</sup> driven tumor models that exhibit only partial anti-tumor responses to either compound alone (Figure 4).

Figure 4: Combination benefit for SHP2 inhibitor and KRAS<sup>G12C</sup>(OFF) inhibitor in preclinical xenograft models of tumors harboring KRAS<sup>G12C</sup> mutations.

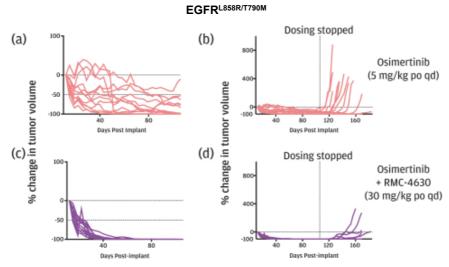


Anti-tumor activity of a representative SHP2 allosteric inhibitor (RMC-4550) and a KRAS<sup>G12C</sup>(OFF) inhibitor (MRTX849 or MRTX1257) dosed daily by oral administration (po, qd) as single agents or in combination in (a) esophageal carcinoma KYSE-410 and (b) NSCLC NCI-H358 KRAS<sup>G12C</sup> cell line-derived xenograft models in mice. Data represent (a) mean tumor volume over time or (b) waterfall plot of individual end of study responses, with tumor volume expressed as a percentage of initial tumor volume at time of study start (truncated at 300%). Data in panel (a) taken from an August 2019 Mirati corporate presentation; show evidence for tumor regressions, in addition to reduced rate of tumor regrowth after 'dosing stopped', for the SHP2 plus KRAS<sup>G12C</sup>(OFF) inhibitor combination group relative to either single agent group. For our data in panel (b) each animal is represented as a separate bar (number of animals per group = 10). Numbers indicate number of regressions (> 10% reduction in tumor volume from starting volume) in each group. RMC-4550 is a potent and selective SHP2 allosteric inhibitor tool compound (see Nichols et al., 2018). MRTX849 is Mirati's KRAS<sup>G12C</sup>(OFF) clinical candidate and MRTX1257 is a potent and selective KRAS<sup>G12C</sup>(OFF) inhibitor tool compound.

In approximately 25% of NSCLC in North and South America, EGFR is mutated and drives tumor growth. EGFR inhibitors are used to treat these types of lung cancer, but emergence of resistance is a clinical problem. With recently approved EGFR inhibitors such as osimertinib (marketed as Tagrisso by AstraZeneca), emergent resistance is frequently due to mutation or amplification of signaling proteins other than EGFR. Similar to the adaptive resistance pathways activated by MEK inhibitors, several of these escape drivers have been shown to signal through SHP2.

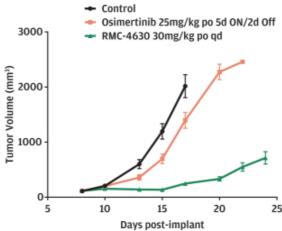
RMC-4630 enhanced the anti-tumor activity of osimertinib in preclinical models of osimertinib-sensitive and osimertinib-resistant EGFR-mutant tumors (Figures 5 and 6). RMC-4630 accelerated and increased the magnitude of tumor regression in an osimertinib-sensitive tumor and delayed and/or reduced tumor regrowth upon cessation of treatment in this model. RMC-4630 also inhibited tumor growth in a patient-derived tumor xenograft that had become resistant to osimertinib via amplification of the oncogene c-MET, an RTK that has been shown to drive some forms of cancer and that signals through SHP2. This suggests that, under circumstances where escape from osimertinib occurs via a SHP2-dependent mechanism, RMC-4630 may have clinical activity.

**Figure 5**: Combination benefit for RMC-4630 and the EGFR inhibitor, osimertinib, in an EGFR<sup>L858R/T790M</sup> osimertinib-sensitive NSCLC xenograft model.



Anti-tumor activity of osimertinib (5 mg/kg) dosed daily by oral administration (po, qd) as a single agent (a and b) or in combination with RMC-4630 (30 mg/kg po, qd) (c and d) in NSCLC NCI-H1975 (EGFRL<sup>858R</sup>17<sup>90M</sup>) cell line-derived xenograft model in mice. Graphs show tumor volume data for individual animals, expressed as a percentage of initial tumor volume at time of study start (number of animals per group =12). Horizontal dotted lines reference the starting tumor volume (0%) and a 50% reduction in tumor volume. Vertical dotted line marks time at which dosing was stopped. Panels (a and c) show the same data as in (b and d) up to the time point of dosing cessation but on an expanded time scale.

**Figure 6**: RMC-4630 suppresses tumor growth in an osimertinib-resistant NSCLC patient-derived xenograft model (EGFR<sup>L858R/T790</sup>/MET<sup>amplified</sup>).



Daily oral administration of RMC-4630 (30 mg/kg po, qd) inhibits tumor growth in an osimertinib-resistant NSCLC patient-derived xenograft model (EGFR<sup>L85R/T790</sup>/MET<sup>amplified</sup>) wherein the EGFR<sup>T790M</sup> allele was no longer detected and the patient tumor exhibited genomic amplification of the MET receptor tyrosine kinase. The human tumor xenograft model was implanted in immune deficient mice. Data represent mean and errors bars represent standard error of the mean. Number of animals per group = 10. Osimertinib 25 mg/kg, 5 days on/2 days off had no significant impact on tumor growth as anticipated.

# Rationale for combining with immune checkpoint inhibitors

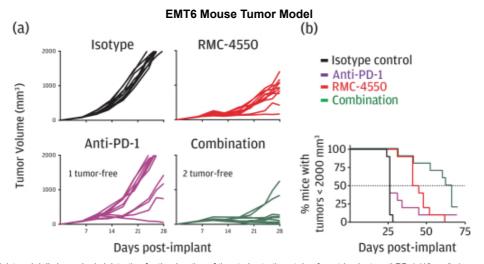
Immune checkpoint inhibitors, such as inhibitors of PD-1, have been useful against a variety of tumor types, including melanomas, breast and lung cancers, certain types of colon cancer and bladder cancers. It has been

proposed in the scientific literature that SHP2 interacts with the PD-1 receptor and mediates at least part of its immune suppressive signals. We have observed that SHP2 inhibition phenocopies some of the effects of PD-1 blockade in certain *in vitro* and *in vivo* models.

We have also seen that SHP2 inhibition inhibits the viability of pro-tumorigenic (M2) macrophages *in vitro*. In the tumor microenvironment *in vivo*, SHP2 inhibition reduced the number of M2 macrophages while also promoting increases in the anti-tumor M1 macrophages population. Therefore, RMC-4630 may increase the ability of the innate and adaptive arms of the immune system to control or even eradicate cancer cells. In models of cancer in immunocompetent mice, SHP2 inhibition activated the murine immune system to slow tumor growth, even in tumors that are not intrinsically sensitive to direct cellular effects of SHP2 inhibition. In preclinical models, the combination of a SHP2 inhibitor with an immune checkpoint inhibitor, such as a PD-1 inhibitor, occasionally induced an immune response that is sufficient for mice to 'reject' their tumors completely and elicit immunological memory.

Significant anti-tumor effects of SHP2 inhibition, both alone and in combination with PD-1 inhibition, were also observed in tumors intrinsically sensitive to SHP2 inhibition *in vitro* (Figure 7). A SHP2 inhibitor such as RMC-4630 may, therefore, elicit anti-tumor effects via two separate biologic mechanisms: targeted inhibition of RAS-dependent tumor growth, and liberation of anti-tumor immune responses by transformation of the tumor microenvironment.

Figure 7: Anti-tumor effects of SHP2 inhibition alone and in combination with PD-1 checkpoint blockade in the EMT6 syngeneic model.



RMC-4550 (30 mg/kg) was administered daily by oral administration for the duration of the study starting at day 6 post-implant; anti-PD-1 (10 mg/kg) was administered every three days by intra-peritoneal administration, for a total of 7 doses starting at day 6 post-implant, or a combination of both was administered to EMT6 tumor bearing immunocompetent mice. Control animals received the isotype control for the anti-PD-1 antibody. Data represent (a) tumor growth of individual mice for each experimental group and (b) Kaplan–Meier curves showing percentage of animals with tumor burden < 2000 mm<sup>3</sup> in each treatment group for the duration of the study. RMC-4550 is a potent and selective SHP2 allosteric inhibitor tool compound. Number of animals per group = 10.

# Development strategy

In summary, preclinical research suggests that RMC-4630 has the potential to cause significant anti-tumor effects:

· In tumors harboring certain mutations of the RAS signaling pathway;

- · When administered at high doses on an intermittent basis;
- When given in combination with other targeted anti-cancer agents such as inhibitors of MEK, EGFR or mutated KRAS, such as KRAS<sup>G12C</sup>;
   and
- If both the direct effects of SHP2 inhibition on cancer cells with RAS pathway mutations and activation of the immune system occur
  concurrently, which may be heightened through combination with a PD-1 inhibitor.

Although we are at an early stage of clinical testing and product candidate development, we believe RMC-4630 is well-positioned to become the backbone of targeted therapy combinations for the treatment of various RAS-dependent tumors (Figure 8).

Figure 8



# Phase 1/2 clinical program

In collaboration with Sanofi, we are evaluating RMC-4630 in a multi-cohort Phase 1/2 clinical program. This RMC-4630 Phase 1/2 program currently consists of two active clinical trials: RMC-4630-01, a Phase 1 study of RMC-4630 as a single agent, and RMC-4630-02, a Phase 1b/2 study of RMC-4630 in combination with the MEK inhibitor cobimetinib.

RMC-4630-01 study of single agent RMC-4630 in patients with advanced solid tumors

RMC-4630-01 is a Phase 1 study in patients with advanced cancers, including those with tumors harboring genetically defined mutations in the RAS signaling pathway, that is evaluating the safety, pharmacokinetics and pharmacodynamic effects of RMC-4630 as a single agent under two different dose administration schedules: daily and twice weekly dosing. A preliminary evaluation of anti-tumor activity is also being made in patients who have tumors harboring mutations in the RAS pathway that are predicted to be sensitive to SHP2 inhibition, including KRAS<sup>G12C</sup>, KRAS<sup>G12A</sup>, NF1<sup>LOF</sup>, and BRAF<sup>Class3</sup> and others (e.g., KRAS<sup>amp</sup>).

The RMC-4630-01 study was designed to evaluate two different schedules: a daily dosing schedule and an intermittent dosing schedule (Day 1 and Day 4 of every week). The intermittent schedule was intended to achieve intermittent target coverage which, in preclinical models, was associated with similar or superior activity and better tolerability. The RMC-4630-01 trial is currently being conducted at 12 clinical study sites in the United States.

As of the data cut-off on November 6, 2019, we reported the following preliminary data from RMC-4630-01:

In RMC-4630-01, 66 patients had been enrolled and 63 had received study drug and were evaluable for safety: 14 with the intermittent schedule and 49 with the daily schedule (Tables 1, 5 and 8). Dose escalation has been completed for the daily dosing schedule. Dose escalation continues using the intermittent schedule. Preliminary data suggest that the intermittent schedule will be the preferred schedule for the further development of RMC-4630. Therefore, safety, tolerability and pharmacokinetic data for patients treated with the intermittent schedule are reported separately from patients treated with the daily schedule.

Interim safety and tolerability - intermittent dosing schedule

Fourteen patients dosed with the intermittent schedule have been evaluated for safety after a median RMC-4630 exposure of 1.6 months (range 0.3-5.0 months). Demographic and baseline characteristics information is shown in Table 1.

Table 1: Demographics and baseline characteristics—intermittent schedule in RMC-4630-01 study.

	140 mg D1,D4 (n=8)	200 mg D1,D4 (n=6)
Age, median (range)	63 (47-82)	69 (42-77)
Male (%)	4 (50.0%)	4 (66.7%)
Cancer Type		
Lung (%)	5 (62.5%)	3 (50.0%)
Colon and/or Rectal (%)	<del>_</del> _	1 (16.7%)
Other (%)	3 (37.5%)	2 (33.3%)
ECOG performance status		
0	1 (12.5%)	1 (16.7%)
1	7 (87.5%)	5 (83.3%)
Number of prior cancer therapies, median (range)	6.5 (5-8)	NA

Data as of November 6, 2019

The emerging safety profile is consistent with the mechanistic effects of the product candidate on SHP2 and hence the RAS signaling cascade, including edema, reduced red cell production (low hemoglobin concentration and worsening of pre-existing anemia), reduced platelet production (thrombocytopenia), hypertension and fatigue. This safety profile was largely predictable from preclinical studies and clinical studies of other well-known inhibitors of this pathway. Treatment-related and emergent adverse events, or AEs, occurring in greater than or equal to 10% of patients are listed in Table 2. No related grade 4 or grade 5 AEs have been reported for this schedule. One treatment-related serious adverse event, or SAE, has been reported in a patient with pancreatic cancer receiving 200 mg twice weekly who was hospitalized with grade 3 abdominal distension (see Table 3); the SAE was unresolved at the time the patient withdrew from the study to transfer to hospice care.

Table 2: Related AEs occurring in 3 10% of dosed patients by grade—intermittent schedule in RMC-4630-01 study.

	Any	Grade	Grade	Grade	Grade	Grade
Preferred term	grade	<sup>3</sup> 3	1	2	3	4
Anemia*	5 (35.7%)	2 (14.3%)	1 (7.1%)	2 (14.3%)	2 (14.3%)	_
Fatigue	5 (35.7%)	1 (7.1%)	4 (28.6%)		1 (7.1%)	_
Thrombocytopenia**	5 (35.7%)		2 (14.3%)	3 (21.4%)		_
Edema***	4 (28.6%)	_	4 (28.6%)	_	_	_
Diarrhea	3 (21.4%)	_	3 (21.4%)	_	_	_
Abdominal distension	2 (14.3%)	1 (7.1%)	`	1 (7.1%)	1 (7.1%)	_
Blood creatine phosphokinase increased	2 (14.3%)	` <u>-</u>	2 (14.3%)	`	` <u> </u>	_
Dry mouth	2 (14.3%)	_	2 (14.3%)	_	_	_
Neutropenia	2 (14.3%)		1 (7.1%)	1 (7.1%)	_	_

Data as of November 6, 2019.

Table 3: Related SAEs—intermittent schedule in RMC-4630-01 study.

Preferred term	Number (%)	Dose	Grade	Outcome
Abdominal distension	1 (7%)	200 mg	3	ongoing

Data as of November 6, 2019.

# Pharmacokinetics—intermittent dosing schedule

The pharmacokinetic profile of RMC-4630 after dosing on the intermittent schedule is shown in Table 4 and Figure 9. No accumulation from day 1 to day 15 was observed. Plasma exposure at both dose levels was within the range anticipated to be biologically active from preclinical models. After a single dose of 140 mg, the plasma concentration of RMC-4630 remained above the *in vivo* EC $_{50}$  for pERK for 72 hours. We estimate the half-life of RMC-4630 to be approximately 25 hours.

Table 4: Pharmacokinetics – intermittent schedule in RMC-4630-01 study.

								PK param	eters [Mean(CV	%)]	b)]	
Study	Schedule	Dose	Cycle	le Day	N(Cmax/AUC)	C <sub>max</sub>	Median T <sub>max</sub> AUC <sub>0-24</sub> (range)		Mean accumulation (AUC Ratio)	AUC <sub>0-72</sub>	Median t <sub>1/2</sub> (range)	
					μM	h	μM*h	(AUC Rallo)	μM*h	h		
Mouse efficacy		10 mg/kg				0.98		6.44		NA	NA	
Wouse emcacy		20 mg/kg				3.4		11.7		INA	INA	
	Today	140 ma	1	1	4/4	1.08 (48)	1.5 (1-2)	10.6 (37)		18.0 (28)	25 (23-33)	
RMC-4630-01	Twice	140 mg	1	15	4/4	0.829 (36)	3(2-4)	11.3 (18)	1.1	NA	NA	
KIVIC-4630-0 I	weekly (D1,D4)	200 mg	1	1	4/4	1.50 (59)	2 (1-8)	19.7 (47)		36.0 (39)	28 (22-37)	
	(01,04)		1	15	3/3	1.24 (20)	4 (1-8)	21.8 (35)	1.1	NA	NA	

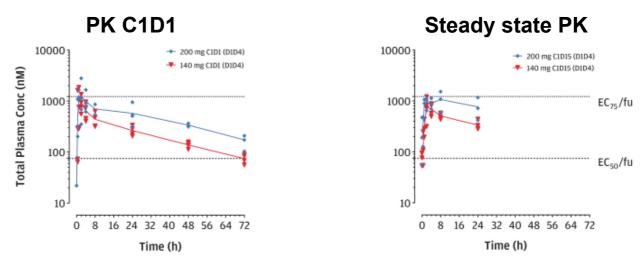
Data as of October 8, 2019.

Includes hemoglobin count decrease.

<sup>\*\*</sup> Includes platelet decrease.

<sup>\*\*\*</sup> Consists of eyelid edema, face edema, generalized edema, lip edema, edema, edema peripheral, periorbital al edema and peripheral swelling

Figure 9: RMC-4630 pharmacokinetics—intermittent schedule in RMC-4630-01 study.



Pharmacokinetic profile of RMC-4630 dosed at either 140 mg or 200 mg on D1 and D4 of each week. Steady state is considered to be day 15 of cycle 1.  $EC_{50}$ /fu and  $EC_{75}$ /fu are the total estimated plasma concentrations in humans that correspond to 50% and 75% inhibition of pERK in KRAS<sup>G12C</sup> tumor models. Steady state in this instance is defined as at least five half lives after starting dosing at which time the pharmacokinetic profile of RMC-4630 on any given day would be considered to be representative of subsequent dosing days.

Interim safety and tolerability—daily dosing schedule

Forty-nine patients have been treated in RMC-4630-01 with the daily schedule. Median RMC-4630 exposure is 1.8 months (range 0.0-13.0 months). Demographic and baseline characteristics information is shown in Table 5.

Table 5: Demographics and baseline characteristics—daily schedule in RMC-4630-01 study.

	20 mg (n=12)	40 mg (n=13)	60 mg (n=18)	80 mg (n=6)
Age, median (range)	62.5 (34-76)	65.0 (45- 84)	60.5 (47-82)	62.0 (40-75)
Male	9 (75.0%)	8 (61.5%)	9 (50.0%)	1 (16.7%)
Cancer Type				
Lung	6 (50.0%)	4 (30.8%)	10 (55.6%)	1 (16.7%)
Colon and/or Rectal	3 (25.0%)	5 (38.5%)	5 (27.8%)	3 (50.0%)
Other	3 (25.0%)	4 (30.8%)	3 (16.7%)	2 (33.3%)
ECOG performance status				
0	6 (50.0%)	3 (23.1%)	6 (33.3%)	3 (50.0%)
1	6 (50.0%)	10 (76.9%)	12 (66.7%)	3 (50.0%)
Number of prior cancer therapies, median (range)	3.0 (1-11)	4.0 (2-10)	5.0 (1-8)	4.5 (1-8)

Data as of November 6, 2019.

The ECOG (Eastern Cooperative Oncology Group) performance status is a scale often used to assess how a patient's disease is progressing.

Although both dosing regimens have been reasonably well tolerated, daily dosing has been associated with more frequent and severe AEs than the intermittent schedule. As with the intermittent schedule, the safety profile from the daily dosing schedule has been consistent with the mechanistic effects of the product candidate

on SHP2 and the RAS signaling pathways. We have not determined a maximum tolerated dose for daily dosing, although dose escalation will not continue beyond the 80 mg daily level already evaluated. If further development with this schedule was pursued, we expect the recommended Phase 2 dose for the daily schedule would be 60 mg daily.

Treatment-related AEs occurring in greater than or equal to 10% of patients who received the daily schedule are shown in Table 6. No toxicities consistent with 'off-target' effects have been reported. Increases in liver enzymes such as alanine transaminase and aspartate transaminase have been observed at all grades. These have been attributed, wholly or in part, to RMC-4630 in 10% or 16% of patients treated with the daily schedule, respectively. In two patients, the increase in alanine transaminase or aspartate transaminase was either grade 3 or grade 4.

Table 6: Related AEs occurring in 3 10% of dosed patients by grade—daily schedule in RMC-4630-01 study.

	Any	Grade	Grade	Grade	Grade	Grade
Preferred term	grade	<sup>3</sup> 3	1	2	3	4
Thrombocytopenia*	14 (28.6%)	7 (14.3%)	4 (8.2%)	3 (6.1%)	6 (12.2%)	1 (2.0%)
Diarrhea	12 (24.5%)	1 (2.0%)	7 (14.3%)	4 (8.2%)	1 (2.0%)	_
Anemia**	11 (22.4%)	6 (12.2%)	1 (2.0%)	4 (8.2%)	6 (12.2%)	_
Edema***	9 (18.4%)	1 (2.0%)	7 (14.3%)	1 (2.0%)	1 (2.0%)	_
AST increased	8 (16.3%)	2 (4.1%)	4 (8.2%)	2 (4.1%)	1 (2.0%)	1 (2.0%)
Fatigue	8 (16.3%)	_	3 (6.1%)	5 (10.2%)	_	_
Hypertension	7 (14.3%)	4 (8.2%)	· <del>-</del>	3 (6.1%)	4 (8.2%)	_
Nausea	6 (12.2%)	<u> </u>	6 (12.2%)	_	_	_
ALT increased	5 (10.2%)	2 (4.1%)	3 (6.1%)	_	2 (4.1%)	_
Dry mouth	5 (10.2%)	<u> </u>	5 (10.2%)	_	<u> </u>	_

Data as of November 6, 2019.

- \* Includes platelet count decrease.
- \*\* Includes hemoglobin decrease.
- \*\*\* Consists of eyelid edema, face edema, generalized edema, lip edema, edema, edema peripheral, periorbital al edema and peripheral swelling.

Eight patients treated with the daily schedule have experienced toxicities involving the lungs or respiratory system that were attributed in part to RMC-4630 by the treating investigator. These were generally moderate or mild. Two additional cases of grade 4 respiratory failure are discussed in more detail below in the description of SAEs. No data has been reported suggesting that systemic activation of the immune system is associated with toxicity in subjects treated with RMC-4630. There have been no reports of pneumonitis. Related adverse events involving other important organs such as the heart, brain and kidneys have been uncommon and generally mild to moderate in severity.

There have been three SAEs thought to be possibly or probably related to the study drug as assessed by the trial sponsor (Table 7). Three additional SAEs were reported in which the investigator was unable to rule out an association with the study drug, but where the evidence for causality by RMC-4630 was absent or considered unlikely by the study sponsor. One patient with extensive metastases of tumor in the lungs developed grade 4 respiratory failure and was hospitalized and treated with oxygen. The SAE was ongoing when the patient was withdrawn from the study. A second patient with fever and radiologic evidence of infectious pneumonia developed grade 4 respiratory failure and was treated with oxygen, systemic antibiotics and corticosteroids. The SAE was ongoing when the patient died due to progression of underlying cancer. A third patient developed a single reading of grade 3 prolongation of QTc. This patient had been receiving 60 mg daily of RMC-4630 but had not received any dose for three days at the time of the reading. The patient had a previous history of prolonged QTc, underlying systemic lupus, and was taking ondansetron. QTc was prolonged (grade 1) at baseline. Five hours after the prolonged QTc reading, the patient had two follow-up ECGs that showed normal QTc interval.

Table 7: Related SAEs—daily schedule in RMC-4630-01 study.

	Number			
Preferred term	(%)	Dose	Grade	Outcome
Dehydration	1 (2%)	60 mg daily	2	Resolved
Anasarca (generalized edema)	1 (2%)	80 mg daily	3	Resolved
Thrombocytopenia	1 (2%)	80 mg daily	4	Unknown

Data as of November 6, 2019.

Table 8: Early data suggest intermittent schedule may be better tolerated than daily schedule in RMC-4630-01 study.

		Related AEs daily (N=49)	intern	Related AEs nittent (N=14)
Deleted educate accounts accounting in 1400/ of national	Any	Grade	Any	Grade
Related adverse events occurring in 310% of patients	grade	³ <b>3</b>	grade	³ <b>3</b>
Thrombocytopenia*	14 (28.6%)	7 (14.3%)	5 (35.7%)	_
Diarrhea	12 (24.5%)	1 (2.0%)	3 (21.4%)	_
Anemia**	11 (22.4%)	6 (12.2%)	5 (35.7%)	2 (14.3%)
Edema***	9 (18.4%)	1 (2.0%)	4 (28.6%)	<u> </u>
Aspartate aminotransferase increased	8 (16.3%)	2 (4.1%)	1 (7.1%)	_
Fatigue	8 (16.3%)	<del>-</del>	5 (35.7%)	1 (7.1%)
Hypertension	7 (14.3%)	4 (8.2%)	1 (7.1%)	<u>'</u> — '
Nausea	6 (12.2%)	_	1 (7.1%)	_
ALT increased	5 (10.2%)	2 (4.1%)	1 (7.1%)	_
Dry mouth	5 (10.2%)	<u> </u>	2 (14.3%)	_
Abdominal distention	1 (2.0%)	_	2 (14.3%)	1 (7.1%)
Blood creatine phosphokinase increased	1 (2.0%)	1 (2.0%)	2 (14.3%)	_
Neutropenia	1 (2.0%)	1 (2.0%)	2 (14.3%)	—

Data as of November 6, 2019.

# Pharmacokinetics—daily dosing schedule

With daily dosing, plasma concentrations of RMC-4630 reached a steady state by day 22 (Table 9 and Figure 10). Plasma concentrations of RMC-4630 in the blood at all daily dose levels were consistently higher than the *in vivo*  $EC_{50}$  for pERK in tumor models. Exposure increased approximately proportionally with increasing dose. The total exposure to RMC-4630 over a 24-hour period at 60 mg daily was 14.6 uM.hr. This is more than twice the exposure that has been required to see anti-tumor effects, particularly tumor stasis, in animal models (6.44 uM.hr).

<sup>\*</sup> Includes platelet count decrease.

<sup>\*\*</sup> Includes hemoglobin decrease.

<sup>\*\*\*</sup> Consists of eyelid edema, face edema, generalized edema, lip edema, edema, edema peripheral periorbital edema, and peripheral swelling.

Table 9: Pharmacokinetics—daily schedule in RMC-4630-01 study.

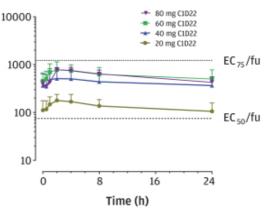
						PK parameters [Mean(CV%)]						
Study	Schedule	Dose	Cycle	Day	N(Cmax/ AUC)	C <sub>max</sub>	Median T <sub>max</sub> (range)	AUC <sub>0-24</sub>	Mean accumulation (AUC ratio)	AUC <sub>0-72</sub>	Median t <sub>1/2</sub> (range)	
					Ī	μM	h	μM*h	(Add fallo)	μM*h	h	
Mouse efficacy		10 mg/kg				0.98		6.44				
wouse emcacy		30 mg/kg				4.81		22.8				
		20 mg	1	1	12/11	0.0852 (54)	2 (1-4.6)	1.06 (40)				
		20 mg	1	22	11/9	0.191 (36)	2 (1-4)	3.19 (37)	3.0			
		40 mg	1	1	13/13	0.267(58)	2 (0.5-24)	3.14(48)		NA	NA	
RMC-4630-01	QD	40 mg	1	22	9/9	0.556 (54)	4 (1-8)	10.3 (53)	3.3	INA	INA	
KIVIC-4030-01	QD	60 mg	1	1	16/16	0.318 (29)	2 (0.5-8)	3.97 (24)				
		60 mg	1	22	9/9	0.857 (45)	2 (1-8)	14.6 (44)	3.7			
		90 ma	1	1	6/6	0.472 (84)	3 (1-4)	6.03 (56)		1		
	80 mg	80 mg	80 mg	1	22	2/2	0.844	3 (2-4)	13.9	2.3		

Data as of October 8, 2019. Number of patients evaluated for parameters Cmax and AUC are shown in N(Cmax/AUC) column.

Figure 10: Pharmacokinetics—daily schedule in RMC-4630-01 study.

# PK C1D1 10000

# **Steady state PK**



Data as of October 8, 2019.

Pharmacokinetic profile of RMC-4630 dosed at either 20 mg, 40 mg, 60 mg or 80 mg daily. Steady state is considered to be day 22 of cycle 1.  $EC_{50}$ /fu and  $EC_{75}$ /fu are the total estimated plasma concentrations in humans that correspond to 50% and 75% inhibition of pERK in KRAS $^{G12C}$  tumor models.

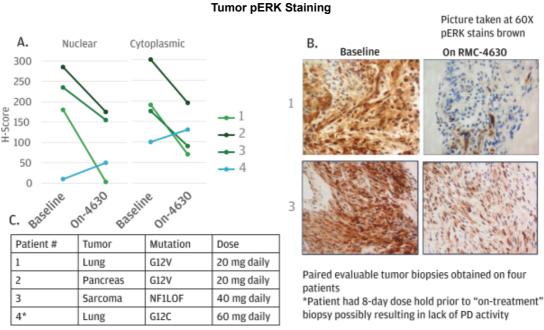
# Pharmacodynamic effects of RMC-4630—daily and intermittent dosing schedules

Activation of the protein ERK, which is an important protein in the RAS signaling pathway and a substrate for MEK, is a good surrogate for the inhibition of pathway activity by a SHP2 inhibitor. The pharmacodynamic effects of RMC-4630 on activation of ERK were studied in the blood cells of patients being treated with RMC-4630. Despite considerable assay variability and inter-patient variability, which is common for these types of dynamic assays in patients, there was a trend in favor of inhibition of activated ERK in peripheral blood cells at all dose levels tested. These effects are consistent with engagement and inhibition of the SHP2 target and downstream RAS signaling by RMC-4630.

Phosphorylation of ERK has been assessed in tumors before and during RMC-4630 administration (Figure 11). In three cases, there was a reduction in phosphorylation of cytoplasmic and nuclear ERK in the tumor while

RMC-4630 was at steady state. One patient's tumor showed no reduction in tumor pERK, but this tumor showed very little phosphorylation in the pre-treatment sample and the patient had not received any RMC-4630 for eight days prior to the second tumor biopsy.

Figure 11: pERK inhibition in tumors on RMC-4630 in RMC-4630-01 study.



Quantitation of phospho-ERK (pERK) in tumor tissue taken from patients treated with daily RMC-4630 at either 20 mg, 40 mg or 60 mg daily. Panel A represents the H score for pERK before and after dosing in four patients. H score is the product of percentage of tumor cells staining positive for pERK and the intensity of staining per cell. Both nuclear and cytoplasmic pERK are shown. Panel B shows the immunohistochemistry sections from which the H score is estimated. pERK stains brown. Panel C provides information for each patient on whom paired biopsies were obtained.

Allelic burden of circulating KRAS<sup>G12C</sup> tumor DNA, or ctDNA, has been assessed prior to the study and at least once during the study in seven patients with tumors harboring KRAS<sup>G12C</sup>. KRAS<sup>G12C</sup> ctDNA was detected in four of seven patients prior to the study. In two patients, with NSCLC and either partial response or stable disease as best response, there was a reduction in circulating KRAS<sup>G12C</sup> ctDNA. In one patient with colon cancer who had a progressive disease the allelic frequency of KRAS<sup>G12C</sup> ctDNA increased.

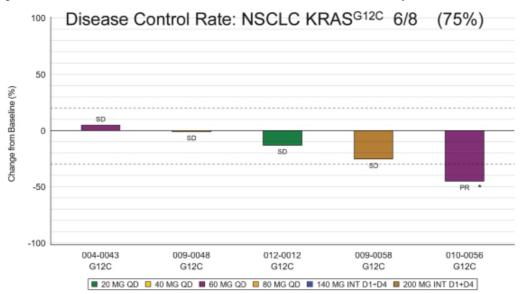
# Interim evidence of clinical activity—daily and intermittent schedules

There is preliminary evidence that RMC-4630 has single agent anti-tumor activity in KRAS mutant NSCLC. One patient, with KRAS<sup>G12C</sup> NSCLC treated at 60 mg daily, had a confirmed partial response, with a 45% reduction in tumor volume as measured by CT imaging and is ongoing on study therapy at 16 weeks. A second, NSCLC patient with KRAS<sup>G12D</sup> and a mutation in the SHP2 gene (SHP2<sup>V428M</sup>), treated with 140 mg on the intermittent schedule, had an unconfirmed partial response (unconfirmed by RECIST 1.1, recorded as best response of stable disease). Disease control rate, or DCR, the sum of best response of partial response and stable disease cases for patients with KRAS<sup>G12C</sup> NSCLC as of the cut-off date was 6/8 (75%).

As of the cut-off date, five patients with KRAS<sup>G12C</sup> NSCLC had follow-up CT scans of target lesions and had either partial response or stable disease (Figure 12); three patients had not reported follow-up measurements of target lesions, of which one has been recorded as best response of stable disease and two of progressive

disease. For all patients with KRAS mutant NSCLC, DCR was 12/18 (67%) (Figure 13). One patient with KRAS<sup>G12V</sup> NSCLC had been on treatment for over 14 months with stable disease (and approximately 15% reduction in tumor volume) as of the cut-off date. Duration of treatment, time to first and best response, duration of response and time to progression in NSCLC patients with any KRAS mutation are shown in Figure 14. In histotypes other than NSCLC, the best response as of the cut-off date was stable disease.

Figure 12: Best change in tumor burden from baseline in KRAS<sup>G12C</sup> NSCLC in RMC-4630-01 study.



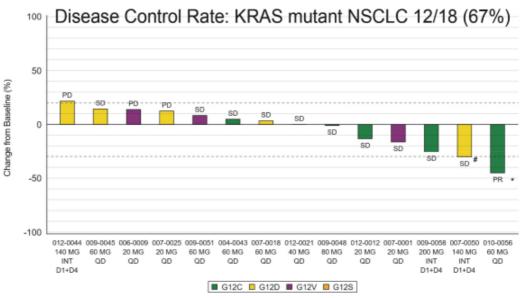
Data as of November 6, 2019.

Waterfall plot of best tumor response for five patients with KRAS<sup>G12C</sup> NSCLC who had baseline target lesions assessed and at least one radiologic follow-up assessment of target lesion size. Percentage (Y axis) represents the percentage change from baseline in the Sum of Longest Diameters of target lesions using RECIST 1.1. Colors represent different dose levels.

# \* Confirmed PR

Data are presented for the efficacy evaluable population (N=8) defined as participants with baseline and at least one post-baseline scan or who died or had clinical progression prior to first post-baseline scan. Three patients are not represented in this figure: 2 PD (1 clinical progression and 1 did not have measurement for one of the target lesions but had new lesion) and 1 SD (pending data entry in EDC).

Figure 13: Best change in tumor burden from baseline for NSCLC with any KRAS mutation in RMC-4630-01 study.

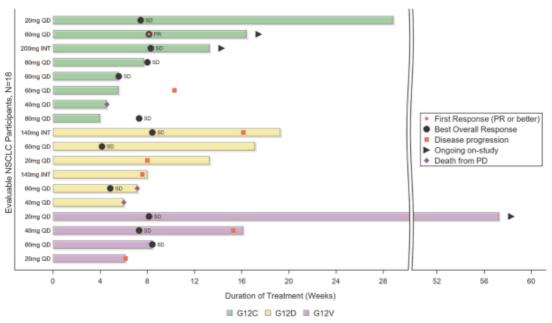


Data as of November 6, 2019.

Waterfall plot of best tumor response for fourteen patients with KRAS mutant NSCLC, including KRAS<sup>G12C</sup>, who had baseline target lesions assessed and at least one radiologic follow-up assessment of target lesion size. Percentage (Y axis) represents the percentage change from baseline in the Sum of Longest Diameters of target lesions using RECIST 1.1. Colors represent different KRAS mutations. Data are presented for the efficacy evaluable population (N=18) defined as participants with baseline and at least one post-baseline scan or who died or had clinical progression prior to first post-baseline scan. Four patients are not represented in this figure: 2 patients had clinical progression prior to first scan, 1 patient did not have measurements for one of the target lesions but progressed developing new lesion, and 1 patient had missing tumor measurements in the database at the time of data extract.

\* Confirmed PR # Unconfirmed PR

Figure 14: Duration of treatment, time to and duration of response in NSCLC with any KRAS mutation in RMC-4630-01 study



Data as of November 6, 2019.

Swimmer plot of duration of treatment, time to first and best response, duration of response and time to progression for eighteen patients with KRAS mutant NSCLC, including KRAS<sup>G12C</sup>. Percentage (Y axis) represents each individual patient. Colors represent different KRAS mutations. Data are presented for the efficacy evaluable population (N=18) defined as participants with baseline and at least one post-baseline scan or who died or had clinical progression prior to first post-baseline scan.

# RMC-4630-02 study of RMC-4630 in combination with cobimetinib in patients with advanced solid tumors

RMC-4630-02 is a Phase 1b/2 study of RMC-4630 in combination with the MEK inhibitor cobimetinib in patients with advanced cancers that harbor mutations in the RAS signaling pathway. The study is designed to evaluate the safety, tolerability and pharmacokinetics of RMC-4630 and cobimetinib under two different dose administration schedules.

The objective of this study is to determine a recommended dose and schedule and further test clinical activity of the combination. Initially, the study assesses twice weekly RMC-4630 (D1,D4) with daily cobimetinib (21 days on, 7 off). In the second schedule, which has not begun dosing, both RMC-4630 and cobimetinib are dosed intermittently. A preliminary evaluation of anti-tumor activity is also being made.

At the latest data cut-off on November 14, 2019, 8 patients had been enrolled and all had received study medication at the first dose level and were evaluable for safety. Dose escalation to the next highest dose level has occurred and enrollment is ongoing.

# Interim safety and tolerability

Eight patients have been evaluated for safety with a median RMC-4630 exposure of 1.4 months (range 0.1 – 2.5 months). Demographic and baseline characteristics information is shown in Table 10.

Table 10: Demographics and baseline characteristics for RMC-4630-02 study.

	RMC-4630 80 mg D1,D4 cobimetinib 20 mg daily (N=8)
Age, median (range)	61.5 (35.0 – 64.0)
Male (%)	3 (37.5%)
Cancer Type	
Lung (%)	
Colon and/or Rectal (%)	5 (62.5%)
Pancreatic (%)	2 (25.0%)
Ovarian (%)	1 (12.5%)
ECOG performance status	
0	5 (62.5%)
1	3 (37.5%)
Number of prior cancer therapies, median (range)	4 (2 – 6)

Data as of November 14, 2019.

The ECOG (Eastern Cooperative Oncology Group) performance status is a scale often used to assess how a patient's disease is progressing.

The emerging safety profile is consistent with the mechanistic effects of both SHP2 inhibition and MEK inhibition, including edema, diarrhea and other gastrointestinal toxicity, anemia and rash. This safety profile was largely predictable from single agent clinical studies of both agents.

Table 11: Related AEs attributed to RMC-4630 in RMC-4630-02 study.

Preferred term	Any grade	Grade 1	Grade 2	Grade 3
Diarrhea	2 (25.0%)	2 (25.0%)	_	_
Edema*	2 (25.0%)	1 (12.5%)	1 (12.5%)	_
Abdominal discomfort	1 (12.5%)	1 (12.5%)	· —	_
Abdominal distension	1 (12.5%)		1 (12.5%)	_
Blood creatinine increased	1 (12.5%)	1 (12.5%)	_	_
Dry mouth	1 (12.5%)	1 (12.5%)	_	_
Leukopenia	1 (12.5%)	1 (12.5%)	_	_
Nephropathy	1 (12.5%)	1 (12.5%)	_	_
Rash	1 (12.5%)	_	<del>-</del>	1 (12.5%)
Rash maculo-papular	1 (12.5%)	1 (12.5%)	_	_

Data as of November 14, 2019.

<sup>\*</sup> Consists of eyelid edema, face edema, generalized edema, lip edema, edema peripheral, periorbital edema and peripheral swelling.

Table 12: Related AEs attributed to cobimetinib in RMC-4630-02 study.

Preferred term	Any grade	Grade 1	Grade 2	Grade 3
Edema*	2 (25.0%)	1 (12.5%)	1 (12.5%)	_
Abdominal discomfort	1 (12.5%)	1 (12.5%)	` <u> </u>	_
Abdominal distension	1 (12.5%)	` <u> </u>	1 (12.5%)	_
Blood creatinine increased	1 (12.5%)	1 (12.5%)	` <u> </u>	_
Decreased appetite	1 (12.5%)	1 (12.5%)	_	_
Dizziness	1 (12.5%)	1 (12.5%)	_	_
Diarrhea	1 (12.5%)	1 (12.5%)	_	_
Leukopenia	1 (12.5%)	1 (12.5%)	_	_
Rash	1 (12.5%)	· - ·	_	1 (12.5%)
Rash maculo-papular	1 (12.5%)	1 (12.5%)	_	

Data as of November 14, 2019.

# **Pharmacokinetics**

The pharmacokinetic profiles of RMC-4630 and cobimetinib are shown in Table 13 and Figure 14. Plasma levels of RMC-4630 were consistent with those obtained in the RMC-4630-01 study and were continuously greater than our predicted  $EC_{50}$  for pERK inhibition in preclinical tumor models.

Table 13: Summary of pharmacokinetics in the RMC-4630-02 study.

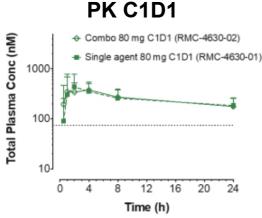
	Dose (mg)						PK parame	eters [Mean(CV%)]		
Charle	DMC 4620	Cabinatinib	Amaluta	Cuala	Davi	N(Cmax/ AUC)	C <sub>max</sub>	Median T <sub>max</sub> (range)	AUC <sub>0-24</sub>	Mean accumulation
Study	RMC-4630	Cobimetinib	Analyte	Cycle	Day	AUC)	μM	n	μM*h	(AUC Ratio)
RMC-4630-02	80	20	RMC-4630	1	1	8/8	0.518 (47)	3 (1-4)	6.14 (35)	
					15	5/5	0.657 (53)	2 (1-4)	10.7 (67)	1.7
			Cobimetinib	1	1	8/8	0.126 (71)	2 (1-4)	1.55 (85)	
					15	5/5	0.374 (41)	2.2 (1-8)	7.09 (51)	4.6
RMC-4630-01	80	NA	RMC-4630	1	1	6/6	0.472 (84)	3 (1-4)	6.03 (56)	
					22	2/2	0.844	3 (2-4)	13.9	2.3

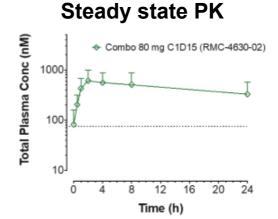
Data as of November 1, 2019.

Number of patients evaluated for parameters Cmax and AUC are shown in N(Cmax/AUC) column.

<sup>\*</sup> Consists of eyelid edema, face edema, generalized edema, lip edema, edema, edema peripheral, periorbital edema and peripheral swelling.

Figure 15: RMC-4630 pharmacokinetics in RMC-4630-02 study.





Data as of November 1, 2019.

# Clinical activity

Only two patients have been evaluated for efficacy in this study. No efficacy data or ctDNA data were available in the electronic database as of the cut-off date.

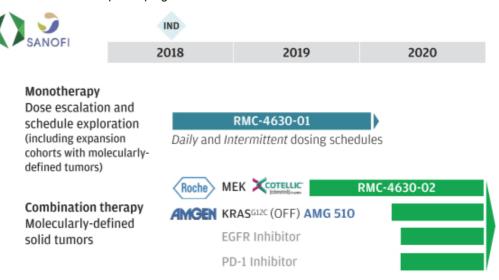
# Ongoing and planned clinical studies with RMC-4630

The RMC-4630-01 Phase 1 study is continuing to enroll patients to determine the maximum tolerated dose and recommended Phase 2 dose for the intermittent dosing schedule. Alternative intermittent schedules may be explored as part of the RMC-4630-01 study and these data may be translated to ongoing combination studies or future studies.

The RMC-4630-02 study, evaluating intermittent dosing of RMC-4630 in combination with cobimetinib, has been activated and dose escalation is ongoing.

In collaboration with others, during 2020, we intend to start dosing patients in Phase 1b studies evaluating the combination of RMC-4630 with the KRAS<sup>G12C</sup>(OFF) inhibitor AMG 510, with the EGFR inhibitor osimertinib, and with a PD-1 inhibitor such as pembrolizumab (Figure 16).

Figure 16: Phase 1/2 planned clinical development program for RMC-4630.



# Our RAS(ON) portfolio

### Overview

We are also developing a portfolio of what we believe to be the first potent, selective and cell-active inhibitors of mutant RAS(ON) proteins. These inhibitors have also exhibited anti-tumor activity *in vivo* in preclinical models. We believe that direct inhibitors of RAS(ON) will suppress cell growth and survival as well as be less susceptible to adaptive resistance mechanisms recognized for RAS(OFF) inhibitors. Initially, we will prioritize four mutant RAS(ON) targets—KRAS<sup>G12C</sup>, KRAS<sup>G13C</sup>, KRAS<sup>G12D</sup> and NRAS<sup>G12C</sup>—and expect to nominate our first development candidate in 2020. We plan to evaluate our RAS(ON) inhibitors alone and in combination with other drugs and investigational new drugs, particularly in-pathway agents. Our proprietary tri-complex technology platform provides us the opportunity to build a portfolio of genetically targeted RAS(ON) inhibitors by discovering and developing compounds that target diverse oncogenic RAS mutants.

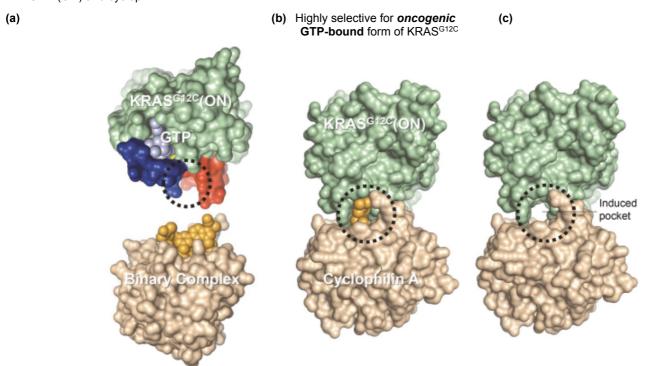
# Challenges and limitations of current approaches for RAS mutant cancers

To our knowledge, every targeted therapy approved or in clinical development for the treatment of RAS-dependent cancers acts on targets that lie either upstream or downstream of RAS(ON) within the cellular signaling cascade. Historically, direct inhibition of any RAS protein has been challenging due to a lack of tractable, or "druggable," binding pockets. However, selective inhibitors of the inactive GDP-bound, or "OFF" form, of KRAS<sup>G12C</sup> are being developed by several companies. Recently reported initial clinical results from two RAS(OFF) inhibitors targeting mutant KRAS<sup>G12C</sup> suggest significant clinical benefit and provide strong pharmacologic validation of this oncoprotein as a cancer driver. These results, along with other preclinical data, provide a compelling basis for our commitment to targeting oncogenic mutant forms of RAS(ON). We are not aware of any programs in clinical development that have successfully targeted any RAS(ON) protein. In tumor cells addicted to RAS(ON), we believe that selective inhibitors of RAS(ON) will suppress cell growth and survival and be less susceptible to adaptive resistance mechanisms recognized for RAS(OFF) inhibitors.

The key drug discovery challenge for any known RAS(ON) protein is the absence of a tractable drug binding site on these RAS(ON) proteins, including different RAS isoforms and mutants. One molecular site of particular focus

has been a switch region protein shallow, solvent-exposed groove, or "valley," that has been detected exclusively in the GTP-bound forms of RAS. Our proprietary tri-complex technology enables us to discover small molecule compounds that inhibit this site by inducing new druggable pockets. This approach is inspired by a biological phenomenon observed in nature, as exemplified by rapamycin. These tri-complexes exploit the surfaces of the two adjacent proteins to form a new ligand-binding pocket. The chaperone protein in the tri-complex helps to form the ligand binding site for the small molecule compound. Further, by physically participating in the tri-complex in the presence of the compound, the chaperone protein sterically occludes the target protein and prevents interaction with affiliated proteins required for propagating oncogenic signals.

Figure 17: KRAS<sup>G12C</sup>(ON) inhibitor RM-009 drives formation of a tri-complex binding to an induced pocket at the interface between KRAS<sup>G12C</sup>(ON) and cyclophilin A.



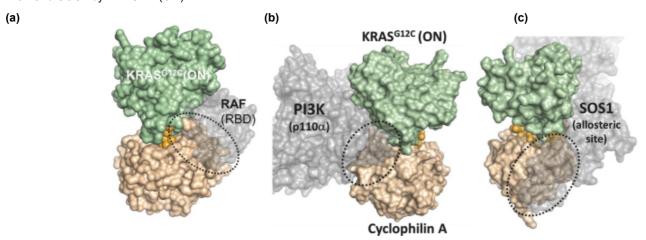
Surface representation of atomic resolution crystal structures of KRAS<sup>G12C</sup> (loaded with a non-hydrolysable analog of GTP in grey, gamma phosphate shown in yellow) (KRAS<sup>G12C</sup>(ON), green) and a binary complex of RM-009 (ochre) and cyclophilin A (brown) (a). The shallow, solvent-exposed groove, or "valley," between the switch I (blue) and switch II (red) regions of KRAS is highlighted. The cyclophilin A-RM-009 binary complex binds to KRAS<sup>G12C</sup>(ON) to form a tri-complex (b) with RM-009 bound in an induced binding pocket at the interface between the two proteins, visible following digital removal of the ligand (c).

We design and synthesize novel RAS(ON) inhibitors that enter a cell and bind to the highly abundant chaperone protein cyclophilin A to create a "binary complex." This binary complex presents a unique surface that has the molecular features needed to engage the RAS mutant of interest in a "tri-complex" with the inhibitor sandwiched in an induced binding pocket at the interface between the two proteins. This tri-complex is held together by chemical interactions between cyclophilin A and the respective RAS(ON) mutant and between the compound and each of the two proteins. In some instances, including in the case of cysteine-containing RAS mutants, our RAS(ON) inhibitors can form a covalent bond with RAS. We use our structure-based drug discovery capabilities to drive rational design and optimization of tri-complex inhibitors of RAS(ON).

### Our RAS(ON) inhibitor programs

We are initially prioritizing four mutant RAS(ON) targets—KRAS<sup>G12C</sup>, KRAS<sup>G13C</sup>, KRAS<sup>G12D</sup> and NRAS<sup>G12C</sup>. We believe our tri-complex RAS inhibitors can act in three ways to suppress growth signaling: (1) we have demonstrated direct disruption of the critical RAS-RAF interaction that triggers the downstream portion of the growth signaling cascade. By extension, our RAS(ON) inhibitors likely also: (2) directly disrupt the RAS-PI3K interaction that stimulates mTOR-dependent growth signaling, and (3) prevent the binding of RAS to a recognized allosteric site of SOS1, thereby blocking a positive feedback loop that amplifies conversion of RAS(OFF) to RAS(ON). The first two effects represent direct suppression of oncogenic RAS signaling. The third effect may attenuate the ability of RAS(ON) to increase GTP-bound levels of other non-mutant forms, i.e. wild-type, of RAS in the same cancer cells that may contribute to overall cell survival and proliferation.

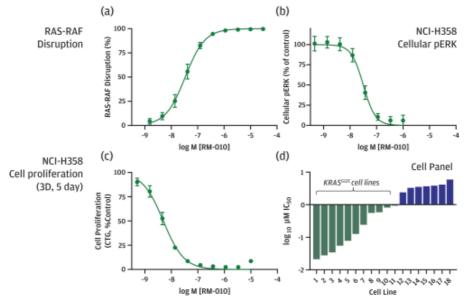
**Figure 18**: Layered structural models illustrating potential for tri-complex KRAS<sup>G12C</sup>(ON) inhibitors to sterically preclude engagement of RAF, PI3K and SOS1 by KRAS<sup>G12C</sup>(ON).



Surface representation of atomic resolution crystal structures of tri-complex of RM-009 with KRAS<sup>G12C</sup>(ON) with structural overlays showing (in grey) interaction with (a) RAS binding domain (RBD) of BRAF, (b) p110a catalytic subunit of PI3K and (c) allosteric site on SOS1.

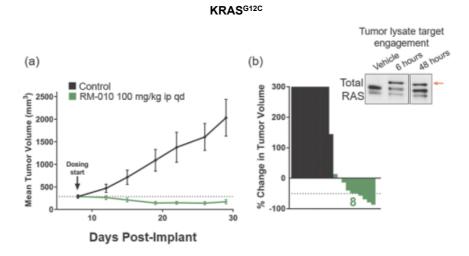
A representative KRAS<sup>G12C</sup>(ON) tri-complex inhibitor causes concentration-dependent disruption of the interaction between KRAS<sup>G12C</sup>(ON) and RAF-binding domain of BRAF (Figure 18). This inhibitor also penetrates KRAS<sup>G12C</sup> mutant tumor cells and potently suppresses pERK levels and cell growth. Most tumor cells carrying this RAS variant are highly sensitive to the inhibitor, whereas none of those with mutations elsewhere in the pathway are sensitive to this inhibitor at pharmacologically relevant concentrations. We believe the range of sensitivities reflects the level of addiction of each specific cell line to KRAS<sup>G12C</sup>(ON). *In vivo* administration of a representative KRAS<sup>G12C</sup>(ON) tri-complex inhibitor (RM-010) drives tumor regressions in a KRAS<sup>G12C</sup> tumor model following repeat dosing (Figure 19). Covalent cross-linking of RAS in the tumor, consistent with KRAS<sup>G12C</sup> target engagement by this KRAS<sup>G12C</sup>(ON) tri-complex inhibitor could be observed following administration of a single dose (Figure 20 inset). Anti-tumor activity with another KRAS<sup>G12C</sup>(ON) tri-complex inhibitor was observed in multiple KRAS<sup>G12C</sup> tumor models, as demonstrated by RM-015, which drove deep tumor regressions in preclinical xenograft models of both NSCLC and PDAC tumors harboring KRAS<sup>G12C</sup> (Figure 21).

**Figure 19**: KRAS<sup>G12C</sup>(ON) tri-complex inhibitor disrupts KRAS<sup>G12C</sup>-RAF interaction; inhibits RAS pathway and proliferation *in vitro* in cells bearing KRAS<sup>G12C</sup> mutation.



Biochemical characterization of the effect of KRAS<sup>G12C</sup>(ON) tri-complex inhibitor RM-010 on the interaction between KRAS<sup>G12C</sup> (loaded with a non-hydrolysable analog of GTP) and the RAS binding domain (RBD) of BRAF was performed using a TR-FRET assay (RAS-RAF disruption) (a). RAS pathway activity and cell proliferation in NSCLC NCI-H358 KRAS<sup>G12C</sup> cells were monitored in 2D cell cultures using levels of ERK1/2 phosphorylation at Thr202/Tyr204 (cellular pERK) (b) and in 3D cell cultures using CellTiter-Glo CTG (cell proliferation) (c). RM-007 potency (expressed as the IC<sub>50</sub> in µM) for inhibition of proliferation of a panel of cell lines bearing KRAS<sup>G12C</sup> mutations (green bars) or other non-KRAS<sup>G12C</sup> mutations in Figure 3. b and c represent the mean of at least two independent studies, each performed in duplicate (error bars show the standard deviation). Data in Figure 4 are from a single study performed in triplicate.

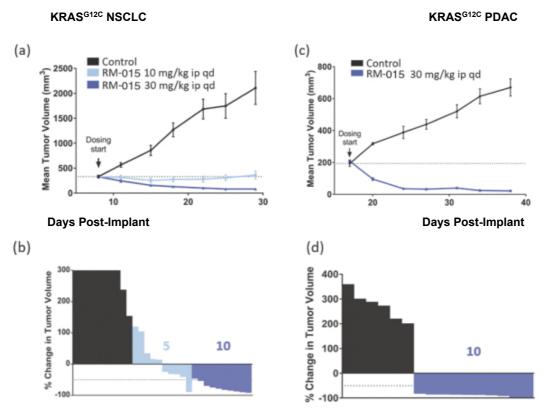
 $\textbf{Figure 20:} \ \, \textbf{Tri-complex KRAS}^{\text{G12C}}(\text{ON}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring KRAS}^{\text{G12C}}(\text{CN}) \ \text{inhibitor suppresses tumor growth in preclinical xenograft model of tumors harboring tumor growth inhibitor suppresses tumor growth inhibitor suppresses tumor growth inhibitor growth model of tumors harboring tumor growth inhibitor growth model of tumor growth model of$ 



Anti-tumor activity of RM-010 (100 mg/kg, intraperitoneal, daily; ip qd) in NSCLC CDX NCI-H358 KRAS<sup>G12C</sup> xenograft model in mice. Data represent mean tumor volume over time (a) or waterfall plot of individual end of study responses, with tumor volume expressed as a percentage of initial tumor volume at time of

study start (truncated at 300%) (b). Number of mice per group = 10. In (a) data represent mean and errors bars represent standard error of the mean. In (b) each animal is represented as a separate bar. Numbers indicate number of regressions (defined as > 10% reduction in tumor volume from starting volume) in each group. Inset, western blot for RAS in tumor lysates prepared from tumors harvested at 6 and 48 hours after administration of a single dose of RM-010 (100 mg/kg, ip) or vehicle to mice bearing NCI-H358 tumors. Data shown are from a single mouse (similar target engagement data were obtained using tumor samples from two additional mice at each time point shown, as well as from three additional mice treated for 24 hours).

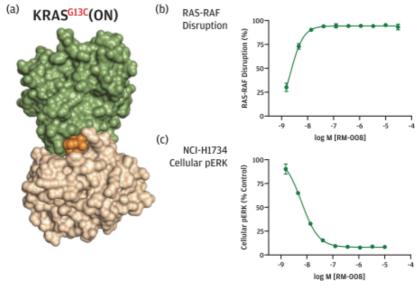
Figure 21: Tri-complex KRAS<sup>G12C</sup>(ON) inhibitor drives tumor regressions in preclinical xenograft models of NSCLC and PDAC tumors harboring KRAS<sup>G12C</sup>.



Anti-tumor activity of RM-015 (10 or 30 mg/kg, intraperitoneal, daily; ip qd) in NSCLC CDX NCI-H358 KRAS G12C (a and b) and PDAC CDX NCI-H358 KRAS G12C (c and d) xenograft models in mice. Data represent mean tumor volume over time (a and c) or waterfall plots of individual end of study responses, with tumor volume expressed as a percentage of initial tumor volume at time of study start (truncated at 300% in b) (b and d). Number of mice per group = 10. In (a) and (c) data represent mean and errors bars represent standard error of the mean. In (b) and (d) each animal is represented as a separate bar. Numbers indicate number of regressions (defined as > 10% reduction in tumor volume from starting volume) in each group.

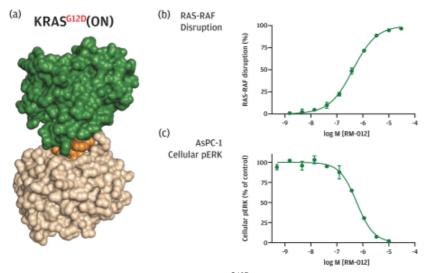
We are also able to leverage our findings with KRAS<sup>G12C</sup>(ON) more broadly to facilitate identification of selective tri-complex inhibitors of other RAS(ON) mutants. We are developing inhibitors of several "hotspot" RAS(ON) mutants, with KRAS<sup>G13C</sup>, KRAS<sup>G12D</sup>, and NRAS<sup>G12C</sup> as particular priorities. We have identified compounds with functional activity in biochemical and cellular assays that measure RAS signaling pathway activity and have representative data for all of these variants (Figures 22, 23 and 24). We have the ability to target different RAS isoforms (i.e., isoform hopping), such as KRAS and NRAS, different mutational hotspots (i.e., hotspot hopping), such as G12 and G13, and different amino acid residues at a given hotspot (i.e., residue hopping), as exemplified by G12C and G12D. We use a common inhibitory mechanism that underscores the versatility of our tri-complex technology platform. Employing this technology, we have the opportunity to generate a broad portfolio of novel RAS(ON) inhibitors with potentially differentiated clinical profiles for use by patients with different tumor genotypes.

**Figure 22**: KRAS<sup>G13C</sup>(ON) tri-complex inhibitor RM-008 disrupts KRAS<sup>G13C</sup>-RAF interaction and inhibits RAS pathway activity *in vitro* in cells bearing KRAS<sup>G13C</sup> mutation.



Surface representation of atomic resolution crystal structure of tri-complex of RM-008 with KRAS<sup>G13C</sup> (loaded with a non-hydrolysable analog of GTP) and cyclophilin A (a). Biochemical characterization of the effect of KRAS<sup>G13C</sup> (ON) tri-complex inhibitor RM-008 on the interaction between KRAS<sup>G13C</sup> (loaded with a non-hydrolysable analog of GTP) and the RAS binding domain (RBD) of BRAF was performed using a TR-FRET assay (RAS-RAF disruption) (b). RAS pathway activity in NSCLC NCI-H1734 KRAS<sup>G13C</sup> cells was monitored in 2D cell cultures using levels of ERK1/2 phosphorylation at Thr202/Tyr204 (cellular pERK) (c). Data shown in Figures b and c represent the mean of duplicate determinations (error bars show the standard deviation) from a single study. Data are representative of at least two independent studies, each performed in duplicate.

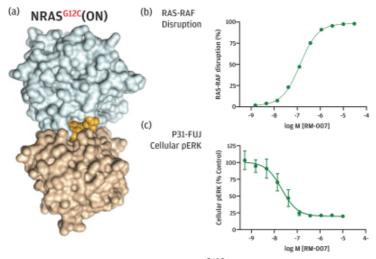
**Figure 23**: KRAS<sup>G12D</sup>(ON) tri-complex inhibitor RM-012 disrupts KRAS<sup>G12D</sup>-RAF interaction and inhibits RAS pathway activity *in vitro* in cells bearing KRAS<sup>G12D</sup> mutation.



Surface representation of atomic resolution crystal structure of tri-complex of RM-012 with KRAS<sup>G12D</sup> (loaded with a non-hydrolysable analog of GTP) and cyclophilin A (a). Biochemical characterization of the effect of KRAS<sup>G12D</sup> (ON) tri-complex inhibitor RM-012 on the interaction between KRAS<sup>G12D</sup> (loaded with a non-hydrolysable analog of GTP) and the RAS binding domain (RBD) of BRAF was performed using a TR-FRET assay (RAS-RAF disruption) (b). RAS pathway activity in pancreatic AsPC-1 KRAS<sup>G13C</sup> cells was monitored in 2D cell cultures using levels of ERK1/2 phosphorylation at Thr202/Tyr204 (cellular pERK) (c). Data

shown in Figures b and c represent the mean of duplicate determinations (error bars show the standard deviation) from a single study. Data in Figure c representative of at least two independent studies, each performed in duplicate.

**Figure 24**: NRAS<sup>G12C</sup>(ON) tri-complex inhibitor RM-007 disrupts NRAS<sup>G12C</sup>-RAF interaction; inhibits RAS pathway activity *in vitro* in cells bearing NRAS<sup>G12C</sup> mutation.

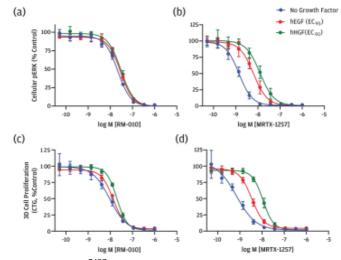


Surface representation of atomic resolution crystal structure of tri-complex of RM-007 with NRAS<sup>G12C</sup> (loaded with a non-hydrolysable analog of GTP) and cyclophilin A (a). Biochemical characterization of the effect of NRAS<sup>G12C</sup> (ON) tri-complex inhibitor RM-007 on the interaction between NRAS<sup>G12C</sup> (loaded with a non-hydrolysable analog of GTP) and the RAS binding domain (RBD) of BRAF was performed using a TR-FRET assay (RAS-RAF disruption) (b). RAS pathway activity in AML P31-FUJ NRAS<sup>G12C</sup> cells was monitored in 2D cell cultures using levels of ERK1/2 phosphorylation at Thr202/Tyr204 (cellular pERK) (c). Data shown in Figure b represent the mean of duplicate determinations (error bars show the standard deviation) from a single study. Data are representative of at least two independent studies, each performed in duplicate (error bars show the standard deviation).

Reduced susceptibility of RAS(ON) inhibitors to adaptive resistance mechanisms, such as RTK activation

In tumor cells that are addicted to high levels of RAS activation, we believe that selective inhibitors of RAS(ON) will suppress cell growth and survival and be less susceptible to adaptive resistance mechanisms recognized for RAS(OFF) inhibitors, specifically the KRAS<sup>G12C</sup>(OFF) inhibitors that are currently in early clinical development. KRAS<sup>G12C</sup>(OFF) inhibitors are susceptible to any cellular perturbations that reduce the intracellular pool of KRAS(OFF). Central to the differentiated profile of KRAS<sup>G12C</sup>(ON) inhibitors is their relative insensitivity to cellular mechanisms that activate KRAS<sup>G12C</sup> and thereby increase the pool of KRAS<sup>G12C</sup>(ON) and decrease the pool of KRAS(OFF). We have demonstrated that the addition of growth factors to cells in order to directly activate RTKs (and hence increase the RAS(ON) pool) reduces the cellular potency of KRAS<sup>G12C</sup>(OFF) inhibitors but has much less effect on cellular potency of KRAS<sup>G12C</sup>(ON) inhibitors (Figure 25). These findings corroborate a previous published report that KRAS<sup>G12C</sup> target engagement by a representative KRAS<sup>G12C</sup>(OFF) inhibitor is significantly reduced by growth factor administration, consistent with the relative depletion of the therapeutic target.

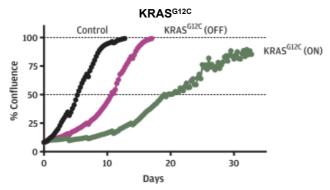
**Figure 25**: Differential susceptibility of KRAS<sup>G12C</sup>(ON) and KRAS<sup>G12C</sup>(OFF) inhibitors to the effects of RTK activation, via growth factor challenge, on inhibition of RAS pathway and cell proliferation *in vitro*.



RAS pathway activity and cell proliferation in NSCLC NCI-H358 KRAS $^{G12C}$  cancer cells were monitored in 2D cell cultures using levels of ERK1/2 phosphorylation at Thr202/Tyr204 after 4 hours of compound incubation ( $\bf a$  and  $\bf b$ ) and in 3D cell cultures using CellTiter-Glo (CTG) after 5 days of compound incubation ( $\bf c$  and  $\bf d$ ). The effects of activation of EGFR and MET receptor, by addition of growth factor ligands human EGF (hEGF) and human HGF (hHGF) (at their EC $_{95}$  concentrations) respectively, on the inhibitory potency of the KRAS $^{G12C}$ (ON) inhibitor RM-010 ( $\bf a$  and  $\bf c$ ) and KRAS $^{G12C}$ (OFF) inhibitor, MRTX1257 ( $\bf b$  and  $\bf d$ ) is shown. Data shown in Figures a, b, c and d represent the mean of two independent studies, each performed in duplicate (error bars show the standard deviation).

Furthermore, using long-term proliferation studies *in vitro* to monitor cell proliferation over time, and by extension the durability of inhibitor effect, we have shown that the KRAS<sup>G12C</sup>(ON) inhibitors produce more durable growth inhibition compared to KRAS<sup>G12C</sup>(OFF) inhibitors (Figure 26). These data highlight the relative insensitivity of KRAS<sup>G12C</sup>(ON) inhibitors *in vitro* to activation of adaptive resistance mechanisms, such as RTK activation, which can be exploited by a tumor cell in response to suppression of the RAS signaling pathway. We believe these findings may be clinically relevant since the durability of response to RAS signaling pathway inhibitors is generally accepted to be a key factor impacting anti-tumor activity.

Figure 26: Effects of tri-complex KRAS<sup>G12C</sup>(ON) inhibitor or KRAS<sup>G12C</sup>(OFF) inhibitors on long term cell growth in vitro.



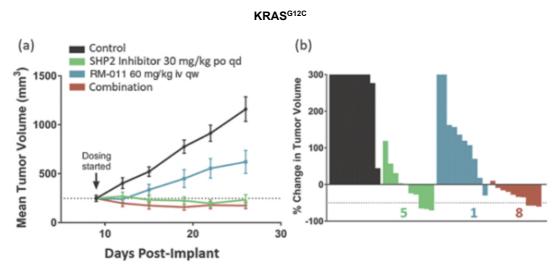
NSCLC NCI-H358 KRAS<sup>G12C</sup> cancer cells were maintained in 2D cell culture and cell proliferation (expressed as % confluence) monitored over time using the Incucyte imaging platform. Cells were incubated in the absence (control, black) or presence of KRAS<sup>G12C</sup>(OFF) (purple) or KRAS<sup>G12C</sup>(ON) (green) inhibitors at equi-efficacious concentrations, that is concentrations that produced 75% inhibition of proliferation in short-term growth studies. Under control conditions cells

reached 100% confluence within ~ 10 days. Addition of the KRAS<sup>G12C</sup>(OFF) inhibitor tool compound, Mirati-11, inhibited cell growth, evident as an ~ 2-fold delay in the time to reach confluence (~ 20 days). In contrast, a representative KRAS<sup>G12C</sup>(ON) inhibitor (RM-007) caused a more sustained suppression of cell proliferation and confluence was not achieved during the time course of the experiment (~ 35 days). Data are from a single experiment, similar data have been obtained in another independent study.

### Combination strategy for KRAS<sup>G12C</sup>(ON) inhibitors

The use of dual and even triple combination regimens to overcome adaptive resistance mechanisms to inhibitors of the RAS signaling pathway is well established based on clinical observations. We and others have demonstrated that robust combination benefit can be conferred in human cancer cell line xenograft models *in vivo* by combining a SHP2 inhibitor with a KRAS<sup>G12C</sup>(OFF) inhibitor. Using the long-term proliferation model, we observed robust combination benefit *in vitro* from combining a SHP2 inhibitor and a KRAS<sup>G12C</sup>(ON) inhibitor. While the molecular mechanism(s) underlying this combinatorial benefit has not been fully established, the combination of SHP2 inhibition and KRAS<sup>G12C</sup>(ON) inhibitor does demonstrably increase apoptosis, or programmed cell death, in a KRAS<sup>G12C</sup> cell line *in vitro*. Combination benefit was also observed *in vivo* for a SHP2 inhibitor and a KRAS<sup>G12C</sup>(ON) inhibitor (Figure 27).

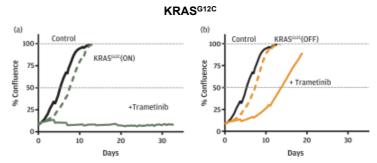
**Figure 27:** Combination benefit for tri-complex KRAS<sup>G12C</sup>(ON) inhibitor and SHP2 inhibitor in preclinical xenograft model of tumors harboring KRAS<sup>G12C</sup> mutations.



Anti-tumor activity of RM-011 (60 mg/kg, intravenous, once weekly; iv qw) and SHP2 inhibitor (RMC-4550) (30 mg/kg, oral, daily; po qd) as single agents or in combination in NSCLC CDX NCI-H358 KRAS<sup>G12C</sup> xenograft model in mice. Data represent tumor volume over time (a) or waterfall plot of individual end of study responses, with tumor volume expressed as a percentage of initial tumor volume at time of study start (truncated at 300%) (b). Number of mice per group = 10. In (a) data represent mean, errors bars represent standard error of the mean. In (b) each animal is represented as a separate bar. Numbers indicate number of regressions (defined as > 10% reduction in tumor volume from starting volume) in each group.

Another rational combination partner for a KRAS<sup>G12C</sup>(ON) inhibitor is a MEK inhibitor. In the long-term *in vitro* proliferation model, dramatic combination benefit was demonstrated for a MEK inhibitor (trametinib) and a KRAS<sup>G12C</sup>(ON) inhibitor (Figure 28). Complete and sustained inhibition of cell growth and substantial cell death were observed. These effects are in contrast to the relatively rapid escape observed with the combination of a KRAS<sup>G12C</sup>(OFF) inhibitor and trametinib, in which cells reached full confluence within 20 days.

Figure 28: Effects of tri-complex KRAS<sup>G12C</sup>(ON) inhibitor or KRAS<sup>G12C</sup>(OFF) inhibitor alone and in combination with MEK inhibitor, trametinib, on long term cell growth *in vitro*.



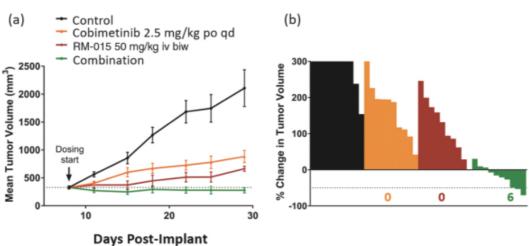
NSCLC NCI-H358 KRAS $^{G12C}$  cancer cells were maintained in 2D cell culture and cell proliferation (expressed as % confluence) monitored over time using the Incucyte imaging platform. Cells were incubated in the absence (control, black) or presence of an EC<sub>50</sub> concentration of test articles. (a) Addition of KRAS $^{G12C}$ (ON) inhibitor (RM-007, dotted green line) produced a modest delay in the time for cells to reach 50% confluence, but the simultaneous addition of an EC<sub>50</sub> concentration of the MEK inhibitor trametinib (solid green line) caused complete inhibition of cell growth and no viable cells were apparent during the time course of the experiment (~ 35 days). (b) Addition of a KRAS $^{G12C}$ (OFF) inhibitor (Mirati-11, orange dotted line) produced a similar modest delay in the time for cells to reach 50% confluence and although the simultaneous addition of trametinib (solid orange line) caused a slight delay in cell proliferation, indicative of an initial combinatorial benefit, the cells escaped relatively quickly and approached full confluence within ~20 days. Data are from a single experiment, similar data have been obtained in another independent study.

These results can be interpreted within the framework of what is known regarding the mechanism of action of the respective compounds and their effects on RAS signaling pathway activity. Hyperactivation of RTKs accompanied by reactivation of RAS is a well-established response to MEK (or ERK) inhibition, reflecting relief of endogenous inhibitory feedback loops in the presence of the downstream inhibitor. Consistent with this hypothesis, others have shown that MEK inhibition reduces KRAS<sup>G12C</sup> target engagement by a representative KRAS<sup>G12C</sup>(OFF) inhibitor. In contrast, MEK inhibitor-induced activation of RAS does not antagonize the activity of a compound that inhibits KRAS<sup>G12C</sup>(ON) directly; rather, in this context the complementary mechanisms of the two agents can drive maximal pathway inhibition, which manifests as cell death.

We also observed combination benefit for a KRAS<sup>G12C</sup>(ON) inhibitor and a MEK inhibitor *in vivo* in a preclinical xenograft model of tumors harboring KRAS<sup>G12C</sup> mutations (Figure 29).

Figure 29: Combination benefit for tri-complex KRAS<sup>G12C</sup>(ON) inhibitor and MEK inhibitor in preclinical xenograft model of tumors harboring KRAS<sup>G12C</sup> mutations.





Anti-tumor activity of RM-015 (50 mg/kg, intravenous, twice weekly; iv biw) and MEK inhibitor (cobimetinib) (2.5 mg/kg, oral, daily; po qd) as single agents or in combination in NSCLC CDX NCI-H358 KRAS<sup>G12C</sup> xenograft model in mice. Data represent tumor volume over time (a) or waterfall plot of individual end of study responses, with tumor volume expressed as a percentage of initial tumor volume at time of study start (truncated at 300%) (b). Number of mice per group = 10. In (a) data represent mean, errors bars represent standard error of the mean. In (b) each animal is represented as a separate bar. Numbers indicate number of regressions (defined as > 10% reduction in tumor volume from starting volume) in each group.

### Drug discovery, optimization and development strategy

Initially, we intend to prioritize four mutant RAS(ON) targets in our drug discovery efforts—KRAS<sup>G12C</sup>, KRAS<sup>G12C</sup>, KRAS<sup>G12D</sup>, and NRAS<sup>G12C</sup>. Our current RAS(ON) drug discovery programs are in either a lead generation or lead optimization stage.

Similarly to "Rule of 5" drug discovery programs in the lead generation stage, in the lead generation stage for our RAS(ON) targets, we prosecute iterative cycles of compound design, synthesis and testing in various assays to identify specific chemical features that contribute to desired characteristics, such as potent and durable inhibition of the target, selectivity for the target of interest, physicochemical properties (for example, solubility) that support formulation, *in vivo* ADME (absorption, distribution, metabolism and excretion), intrinsic chemical stability, and tolerability *in vivo*. The lead optimization stage for our RAS(ON) targets involves further iterative cycles of compound design, synthesis and testing toward the goal of bringing these features together in individual compounds to meet development candidate profiles. As compounds advance through this process, they undergo progressive scrutiny through extensive preclinical tests both *in vitro* and *in vivo*, culminating in development candidate selection followed by IND-enabling studies conducted in accordance with regulatory guidelines.

These iterative design-make-test cycles can be more challenging for complex "Beyond Rule of 5" small molecules such as our tri-complex inhibitors, and we have developed tools, processes and know-how to support practical drug discovery of these types of molecules. As for conventional "Rule of 5" drug discovery programs, our compounds produced during lead generation or optimization stages are expected to have a diverse range of properties. Some of these compounds will not meet our candidate profile and will be rejected while others will

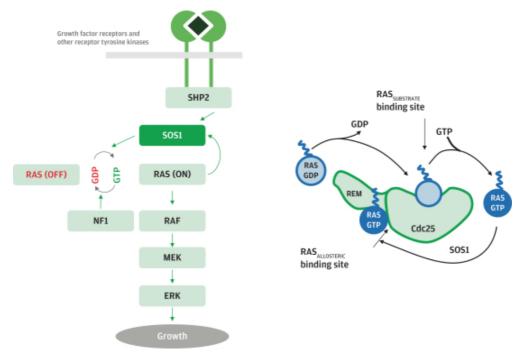
fulfill some of the characteristics of our candidate profile, and the features of such compounds will be retained where possible. To date approximately 2,000 different test compounds have been produced and characterized in various *in vitro* assays, with a subset of these characterized *in vivo* in rodents. The compounds reported in Figures 20, 21, 27 and 29 are examples of tri-complex KRAS(ON) inhibitors that have demonstrated *in vivo* anti-tumor activity in xenograft models of human cancers in mice and were generally well-tolerated as indicated by either minimal or no body weight loss and an absence of observable gross abnormalities in these studies. We have also identified compounds with unfavorable properties such as low *in vitro* potency for KRAS<sup>G12C</sup>(ON), cross-reactivity with one or more well-known safety targets, low solubility, poor ADME properties, including lack of oral bioavailability, and poor tolerability. Adverse effects have been observed following administration of high doses of some compounds to rodents by one or more routes of administration. As these effects were seen with only certain compounds and did not extend across all studies, doses or routes of administration, we do not believe there is a generalized liability of the tri-complex platform or chemical scaffolds underlying our RAS(ON) inhibitor programs.

We believe our multiparameter optimization efforts will yield candidates that meet our development candidate profiles to be advanced into IND-enabling studies and clinical studies as appropriate and we expect to nominate our first RAS(ON) development candidate in 2020.

### Our SOS1 program

The SOS1 protein is responsible for stimulating the conversion of RAS from the inactive GDP-bound form (RAS(OFF)) to the active GTP-bound form (RAS(ON)) in response to growth factor receptor signaling. SOS1 directly activates RAS proteins by promoting the release of the bound GDP and thereby facilitating the binding of GTP, which is present within a cell in great excess to GDP, to generate RAS(ON). SOS1 itself is activated by RAS through the binding of RAS(ON) to an allosteric site on the SOS1 protein (Figure 30). As a result, there is a positive feedback loop between SOS1 and RAS that increases RAS signaling. The activation of RAS by SOS1 is "processive"; that is, once a single molecule of SOS1 is activated it can sequentially activate multiple RAS molecules. As a result, the potential for amplification of RAS signals by SOS1 is considerable. Therefore, we believe that inhibition of SOS1 may represent a viable approach for targeting RAS-driven tumors

Figure 30



We have designed and synthesized a number of potent and selective inhibitors of SOS1. The current focus of our discovery program is to improve the potency and drug-like properties of compounds in this series. We are investigating the potential utility of SOS1 inhibitors alone and in combination with our other proprietary inhibitors of RAS signaling, such as our SHP2 inhibitors and mutant-selective RAS(ON) inhibitors, in a wide range of *in vitro* and *in vivo* models of genetically-defined cancers that are addicted to the RAS signaling pathway.

# Our 4EBP1/mTORC1 program

### Overview

mTORC1 is a critical regulator of metabolism, growth and proliferation within cells, including cancer cells. The abnormal activation of mTORC1, and subsequent inactivation of the tumor suppressor 4EBP1, is a mechanism that is frequently harnessed by cancer cells to gain a growth and proliferation advantage over normal cells. Our preclinical development candidate, RMC-5552, selectively and deeply inhibits mTORC1, thereby preventing phosphorylation and inactivation of 4EBP1, a downstream protein in the mTOR signaling pathway that normally suppresses expression of certain oncogenes such as C-MYC. Approximately two-thirds of breast cancers contain oncogenic mutations that hyper-activate mTORC1. We advanced RMC-5552 into IND-enabling development in June 2019.

### Preclinical studies

RMC-5552 is a potent and selective inhibitor of mTORC1, that exhibits selectivity over mTORC2 and a broad panel of kinases (Figure 31).

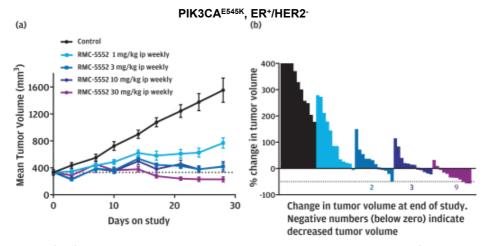
Figure 31: In vitro profile of RMC-5552

	RMC-5552
Inhibition of mTORC1: pS6K	0.14 nM
Inhibition of mTORC1: p4EBP1 <sup>1</sup>	0.48 nM
Selectivity over mTORC2: pAKT <sup>2</sup>	40X
Selectivity over kinases: e.g., PI3K <sup>2</sup>	53X

In vitro potency for RMC-5552 to inhibit phosphorylation of mTORC1 (pS6K and p4EBP1) and mTORC2 (pAKT) substrates was determined in MDA-MB-468 cells. Data represent mean of at least two independent determinations. Selectivity over mTORC2 represents ratio of potency values for inhibition of AKT phosphorylation to inhibition of 4EBP1 phosphorylation. Selectivity over other kinases e.g. PI3K, represents ratio of potency values for inhibition of PI3K-alpha to mTORC1 in a biochemical, synthetic peptide phosphorylation assay. Rapamycin is not considered an inhibitor of 4EBP1 phosphorylation. Active site inhibitors are not considered selective over mTORC2 or other kinases.

In a xenograft model of human breast cancer in which an activating mutation in PIK3CA drives hyperactivation of the mTOR pathway, RMC-5552 inhibited tumor 4EBP1 phosphorylation at 48 hours-post intraperitoneal administration of a 3 mg/kg or 10 mg/kg dose by 71% and 63%, respectively. RMC-5552 induced significant regression of tumors when administered weekly via intraperitoneal injection at doses that were well tolerated (Figure 32). Inhibition of tumor growth was also seen in models of ovarian, liver, bladder and head and neck cancers that collectively bear activating mutations in the mTOR signaling pathway, are addicted to production of oncogenic proteins, and/or are dependent on inactivation or loss of 4EBP1.

Figure 32: RMC-5552 drives tumor regressions in a preclinical xenograft model of breast cancer tumors harboring PIK3CA mutations.



Once weekly intraperitoneal administration of RMC-5552 (3 mg/kg, 10 mg/kg or 30 mg/kg ip qw) produces a dose-dependent inhibition of tumor growth in breast cancer MCF-7 ER-positive (ER<sup>+</sup>), HER2-negative (HER2-), PIK3CA<sup>E545K</sup> cancer cell line-derived xenograft model in mice. Data represent tumor volume over time (a) and waterfall plots of individual end of study responses with tumor volume expressed as a percentage of initial tumor volume at time of study start (truncated at 400%) (b). Number of mice per group = 12. In (a) data represent mean, errors bars represent standard error of the mean. In (b) each animal is represented as a separate bar. Numbers indicate number of regressions (defined as > 10% reduction in tumor volume from starting volume) in each group. Dotted line in panel (b) references 50% reduction in tumor volume.

We also tested RMC-5552 in the U87 cell line representing a human brain cancer, glioblastoma multiforme (Figure 33). In this model the tumors were implanted directly into the brains of immunodeficient mice to more accurately mimic the human disease. RMC-5552 was tested at two different doses, both of which were given once weekly via intraperitoneal injection. Because of the technical difficulties associated with measuring the size of tumors growing within the cranium, the main outcome measure for this experiment was duration of survival. RMC-5552 was well tolerated and prolonged survival at all doses tested.

Figure 33: RMC-5552 prolongs survival in a preclinical xenograft model of glioblastoma multiforme harboring PTENLOF.

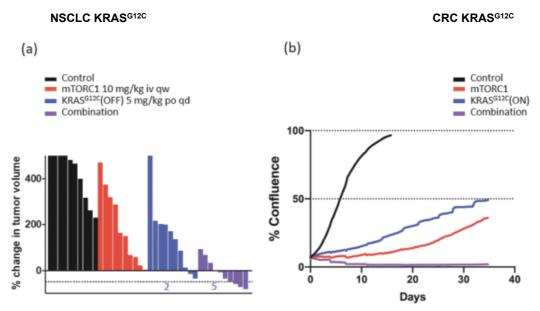
### PTENLOF orthotopic glioblastoma model 100 Control RMC-5552 3mg/kg ip qw RMC-5552 10mg/kg ip qw 80 Survival (%) Median 60 Survival 15 days 37 days\*\*\* 40 36 days\*\*\* 20 0 20 0 10 30 40

Anti-tumor activity of RMC-5552 (3 mg/kg and 10 mg/kg once weekly intraperitoneal administration, ip qw), in a U87MG-Luc (PTEN<sup>LOF</sup>) orthotopic glioblastoma model in mice. Data represent Kaplan–Meier curves showing percentage of animals meeting the survival endpoint in each treatment group for the duration of the study, number of animals per group = 10. RMC-5552 (3 mg/kg and 10 mg/kg (ip, qw) is statistically significantly different from control (\*\*\*p<0.0001, Log-rank test).

Days on study

As described earlier in this prospectus RAS-addicted cancer cells can develop adaptive resistance to RAS pathway inhibitors and lose sensitivity to treatment by hijacking other cell signaling circuitry to circumvent the inhibition. In some cases this may involve activation of the mTOR signaling cascade. We have observed combination benefit for an mTORC1 inhibitor with KRAS<sup>G12C</sup> inhibitors in preclinical models of NSCLC and CRC cancers harboring KRAS<sup>G12C</sup> mutations (Figure 34). These preclinical data support evaluation of our RAS(ON) inhibitors in combination with RMC-5552. Based on the strength of our preclinical studies, we advanced RMC-5552 into IND-enabling development in June 2019. We expect to be ready to submit an IND for RMC-5552 in 2020.

**Figure 34**. Combination benefit for mTORC1 inhibitor with KRAS<sup>G12C</sup> inhibitors in preclinical models of cancers harboring KRAS<sup>G12C</sup> mutations.



Combination benefit between an mTORC1 inhibitor and KRAS<sup>G12C</sup> inhibitor was explored in NSCLC (a) and CRC (b) cancer cells harboring KRAS<sup>G12C</sup> mutations. (a) Anti-tumor activity of mTORC1 inhibitor (RM-006 at 10 mg/kg, intravenous, once weekly; iv qw) and KRAS<sup>G12C</sup> (OFF) inhibitor AMG-510 (5 mg/kg, oral, daily; po qd) as single agents or in combination in NSCLC CDX NCI-H358 KRAS<sup>G12C</sup> xenograft model in mice. Data represent waterfall plot of individual end of study responses, with tumor volume expressed as a percentage of initial tumor volume at time of study start (truncated at 450%). Number of mice per group = 10. Each animal is represented as a separate bar. Numbers indicate number of regressions (defined as > 10% reduction in tumor volume from starting volume) in each group.

b) CRC SW837 KRAS<sup>G12C</sup> cancer cells were maintained in 2D cell culture and cell proliferation (expressed as % confluence) monitored over time using the Incucyte imaging platform. Cells were incubated in the absence (control, black) or presence of an mTORC1 inhibitor (RM-006, 10 nM) or KRAS<sup>G12C</sup>(ON) inhibitor (RM-015, 1 μM). Incubation with the mTORC1 inhibitor (red) or KRAS<sup>G12C</sup>(ON) inhibitor (blue) alone delayed the time for the cells to reach 50 % confluence. However, the simultaneous addition of the two inhibitors caused complete inhibition of cell growth and no viable cells were apparent during the time course of the experiment (~ 35 days). Data are from a single experiment, similar data have been obtained in another independent study. RM-006 is a proprietary mTORC1 inhibitor tool compound.

# Commercial plan

We intend to retain significant development and commercialization rights to our product candidates and, if marketing approval is obtained, to commercialize our product candidates on our own, or potentially with a partner, in the United States and other regions. Our most advanced product candidate, RMC-4630, is the subject of a global collaboration with Sanofi. Unless otherwise delegated to us by the joint commercialization committee, Sanofi has the sole right and responsibility for all aspects of the commercialization of SHP2 inhibitors in the world for any and all uses, at its expense, subject to our right to elect to co-promote SHP2 inhibitors in the United States. In the United States, we will share equally with Sanofi the profits and losses applicable to commercialization of SHP2 inhibitor products. Sanofi is responsible for manufacturing SHP2 inhibitors for commercial supply and is expected to lead commercialization efforts through a joint commercialization committee representing the partners. We currently have no sales, marketing or commercial product distribution capabilities. We intend to build the necessary infrastructure and capabilities over time for the United States, and potentially other regions, following further advancement of our product candidates. Clinical data, the size of the addressable patient population, the size of the commercial infrastructure and manufacturing needs, and the status of our pipeline, may all influence or alter our commercialization plans.

# Collaboration agreement with Sanofi

In June 2018, we entered into a collaborative research, development and commercialization agreement with Aventis, Inc. (an affiliate of Sanofi), or the Sanofi Agreement, to research and develop SHP2 inhibitors, including RMC-4630, for any indications. The Sanofi Agreement was assigned to Genzyme Corporation, a Sanofi affiliate, in December 2018. For the purposes of this discussion, we refer to Genzyme Corporation as Sanofi. Pursuant to the Sanofi Agreement, we granted Sanofi a worldwide, exclusive, sublicensable (subject to our consent in certain circumstances) license under certain of our patents and know-how to research, develop, manufacture, use, sell, offer for sale, import and otherwise commercialize SHP2 inhibitors, including RMC-4630, for any and all uses, subject to our exercise of rights and performance of obligations under the Sanofi Agreement. Such intellectual property exclusively licensed to Sanofi includes our interest under any of our solelyowned or jointly-owned inventions arising out of activities undertaken pursuant to the development of SHP2 inhibitor product candidates under the Sanofi Agreement.

Under the Sanofi Agreement, we have primary responsibility for performing preclinical research on SHP2 inhibitors, pursuant to an initial research plan and budget directed toward the identification, validation and optimization of SHP2 inhibitors for 2018-2020. The research plan and budget beyond 2020 will be determined by a joint research and development committee, over which Sanofi has final decision-making power subject to certain exceptions. We have primary responsibility for early clinical development of RMC-4630 pursuant to an initial development plan. The joint research and development committee is responsible for preparing development plans for other SHP2 inhibitors approved by such committee for development, if any. Sanofi is responsible for 80% of all internal and external research costs and expenses incurred under the research plan for 2019 and 2020, and for all other internal and external costs and expenses incurred to perform activities under the research and development plans. We are responsible for 20% of all internal and external research costs incurred under the research plan for 2019 and 2020, in which our share of these costs is estimated to be approximately \$2 million in total, representing less than three percent of the anticipated overall budget for the SHP2 program in 2019 and 2020. Sanofi is responsible for all costs under the development plan, and since our SHP2 program is in clinical development, the costs under the development plan are expected to be significantly greater than the costs under the research plan. We are responsible for the manufacture of SHP2 inhibitors for Phase 1 and non-registrational Phase 2 clinical trials at Sanofi's cost, while Sanofi is responsible for manufacturing SHP2 inhibitors for all other clinical trials and commercial supply. Sanofi has the sole right and responsibility to perform all regulatory activities under the Sanofi Agreement, except with respect to certain trials conducted by us or otherwise conducted under our IND, including our current clinical trials evaluating RMC-4630. Once we have completed all clinical trials for a product candidate that are assigned to us under a development plan, all regulatory approvals for such product candidate are automatically assigned to Sanofi. Unless otherwise delegated to us by the joint commercialization committee, Sanofi also has the sole right and responsibility for all aspects of the commercialization of SHP2 inhibitors in the world for any and all uses, at its expense, subject to our right to elect to co-promote SHP2 inhibitors in the United States. Sanofi is obligated to use commercially reasonable efforts to seek marketing approval for at least one SHP2 inhibitor product candidate in certain major market countries. Sanofi agrees to provide us, and we agree to provide Sanofi, with research, development and commercialization updates through the joint committees.

Pursuant to the Sanofi Agreement, we received an upfront payment of \$50 million from Sanofi in July 2018. Upon the achievement of specified development and regulatory milestones, Sanofi will be obligated to pay us up to \$520 million in the aggregate, including up to \$235 million upon the achievement of specified development milestones and up to \$285 million upon achievement of certain marketing approval milestones. In the United States, we will share equally with Sanofi the profits and losses applicable to commercialization of SHP2 inhibitor products, pursuant to a profit/loss share agreement that the parties will negotiate based on key terms agreed in the Sanofi Agreement. On a product-by-product basis, Sanofi will also be required to pay us tiered royalties on annual net sales of each product outside the United States ranging from high single digit to

mid-teen percentages. The royalty payments are subject to reduction under specified conditions set forth in the Sanofi Agreement. Subject to certain exceptions, the royalties are payable on a product-by-product and country-by-country basis until the latest of the expiration of all valid claims covering such product in such country contained in the patents licensed to Sanofi under the Sanofi Agreement and the expiration of regulatory exclusivity for such product in such country.

Sanofi has the sole and exclusive right to file, prosecute and maintain any patents licensed to it pursuant to the Sanofi Agreement, as well as to enforce infringement of or defend claims against such patents that relate to SHP2 inhibitor products.

Unless terminated earlier, the Sanofi Agreement will continue in effect until the later of the expiration of all of Sanofi's milestone and royalty payment obligations and the expiration of the profit/loss share agreement. Upon expiration of the Sanofi Agreement, the licenses granted to Sanofi thereunder shall become fully paid-up, royalty-free, perpetual and irrevocable. Sanofi may terminate the Sanofi Agreement in its entirety or on a country-by-country or product-by-product basis for any reason or for significant safety concerns, upon prior notice to us within certain specified time periods. Sanofi may terminate the Sanofi Agreement in its entirety upon our change of control, with prior notice. Either party may terminate the Sanofi Agreement if an undisputed material breach by the other party is not cured within a defined period of time, or immediately upon notice for insolvency-related events of the other party. We may terminate the Sanofi Agreement after a certain number of years if Sanofi develops a competing program without commencing a registrational clinical trial for a SHP2 inhibitor product candidate, and subject to certain other conditions. We may also terminate the Sanofi Agreement at any time, if Sanofi ceases certain critical activities for SHP2 inhibitor product candidates for more than a specified period of time, provided that such cessations of critical activity were not a result of certain specified factors, and subject to certain other conditions. Upon any termination of the Sanofi Agreement with respect to any product or country, all licenses to Sanofi with respect to such product or country shall automatically terminate and all rights generally revert back to us. If the Sanofi Agreement is terminated, in its entirety or with respect to a product, other than by us for Sanofi's material breach or insolvency, we may be required to pay Sanofi royalties on worldwide net sales of reverted products up to mid-single digit percentages based on the development and regulatory status of such reverted products, in each case subject to reductions in accordance with the terms of the Sanofi Agreement.

# **Acquisition of Warp Drive**

In October 2018, we entered into an Agreement and Plan of Merger pursuant to which we acquired all outstanding shares of Warp Drive. In connection with the acquisition, we issued 33,079,554 shares of our Series B preferred stock and provided \$0.9 million in other consideration, for total consideration valued at \$69.0 million. The Agreement and Plan of Merger contained representations, warranties and covenants by, among and for the benefit of the parties, as well as mutual indemnification obligations.

# Manufacturing

We rely on and will continue to rely on our contract manufacturing organizations, or CMOs, for both drug substance and drug product. Currently, all of our manufacturing is outsourced to well-established third-party manufacturers. We have entered into contracts with CMOs for production of RMC-4630 and RMC-5552 drug substance and drug product for our clinical trials and IND-enabling development studies, respectively, and plan to enter into additional contracts with these or other manufacturers for additional supply.

Our outsourced approach to manufacturing relies on CMOs to first develop manufacturing processes that are compliant with current Good Manufacturing Practice, or cGMP, then produce material for preclinical and clinical studies. Our agreements with CMOs may obligate them to develop and qualify upstream and downstream processes, develop drug product process, validate (and in some cases develop) suitable analytical methods for

test and release as well as stability testing, produce drug substance for preclinical testing, produce cGMP-compliant drug substance, or produce cGMP-compliant drug product. We, and Sanofi, conduct audits of CMOs prior to initiation of activities under these agreements and monitor operations to ensure compliance with the mutually agreed process descriptions and to cGMP regulations.

# Competition

The biotechnology and pharmaceutical industries, and the oncology sector, are characterized by rapid evolution of technologies, fierce competition and strong defense of intellectual property rights. While we believe that our discovery programs, technology, knowledge, experience, and scientific resources provide us with competitive advantages, we face competition from major pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions, among others.

Any product candidates that we successfully develop and commercialize will compete with currently approved therapies and new therapies that may become available in the future. Key product features that would affect our ability to effectively compete with other therapeutics include the efficacy, safety and convenience of our products and the ease of use and effectiveness of any complementary diagnostics and/or companion diagnostics.

There is a large number of companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. These treatments consist of small molecule drug products, biologics, cell-based therapies and traditional chemotherapy. There are also several programs in development targeting SHP2, including those clinical programs run by Novartis AG and Jacobio Pharmaceuticals Co. Ltd. There are several RAS pathway mutations programs, including those directed at KRAS<sup>G12C</sup>(OFF) and KRAS<sup>G12D</sup>(OFF) mutations, including clinical programs directed at KRAS<sup>G12D</sup>(OFF) being conducted by, Amgen Inc., Mirati Therapeutics, Inc., Johnson & Johnson, AstraZeneca plc and Eli Lilly & Co. Other clinical programs directed at mutant RAS are being conducted by Merck & Co./Moderna Therapeutics, Boehringer Ingelheim and Gilead Sciences, Inc. Smaller and other early stage companies may also prove to be significant competitors. In addition, academic research departments and public and private research institutions may be conducting research on compounds that could prove to be competitive.

The availability of coverage and reimbursement from government and other third-party payors will also significantly affect the pricing and competitiveness of our products. Our competitors also may obtain U.S. Food and Drug Administration, or the 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 are able to enter the market.

Many of the companies against which we may compete 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. 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 registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

### Intellectual property

Our success depends in part on our ability and the ability of our collaborators to obtain and maintain proprietary protection for our technology, programs, and know-how related to our business, defend and enforce our intellectual property rights, in particular, our patent rights, preserve the confidentiality of our trade secrets, and operate without infringing valid and enforceable intellectual property rights of others. We endeavor to establish, maintain and enforce intellectual property rights that protect our business interests.

The term of individual patents depends upon the legal term of patents in the countries in which they are obtained. In most countries in which we file, including the United States, the patent term is generally 20 years from the earliest date of filing a non-provisional patent application. assuming the patent has not been terminally disclaimed over a commonly-owned patent or a patent naming a common inventor, or over a patent not commonly owned but that was disqualified as prior art as the result of activities undertaken within the scope of a joint research agreement. In the United States, the term of a patent may also be eligible for patent term adjustment for delays within the United States Patent and Trademark Office, or USPTO. In addition, for patents that cover an FDA-approved drug, the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, may permit a patent term extension of up to five years beyond the expiration of the patent. While the length of such patent term extension is related to the length of time the drug is under regulatory review, 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 per approved drug may be extended and only those claims covering the approved drug product, a method for using it or a method for manufacturing it may be extended. Similar provisions are available in Europe and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug. In the future, if and when our products receive FDA approval, we expect to apply for patent term extensions on patents covering those products. We plan to seek any available patent term extension to any issued patents we may be granted in any jurisdiction where such extensions are available; however, there is no guarantee that the applicable authorities, including the FDA in the United States, will agree with our assessment of whether such extensions should be granted, and if granted, the length of such extensions.

We also rely on trade secrets, know-how, and confidential information relating to our programs to develop and maintain our proprietary position, and seek to protect and maintain the confidentiality of such items to protect aspects of our business that are not amenable to, or that we do not presently consider appropriate for, patent protection. Our trade secrets include, for example, certain program specific syntheses, manufacturing schema, formulations, biomarkers, patient selection strategies, and certain aspects of our proprietary tri-complex technology platform. It is our policy to require our employees, consultants, contractors, outside scientific collaborators, sponsored researchers and other advisors to execute confidentiality agreements prior to the commencement of employment or consulting relationships with us, and for employees, contractors and consultants to enter into invention assignment agreements with us. These agreements generally provide that all confidential information developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. Where applicable, the agreements provide that all inventions to which the individual contributed as an inventor shall be assigned to us, and as such, will become our property. There can be no assurance, however, that these agreements will be self-executing or otherwise provide meaningful protection or adequate remedies for our trade secrets or other proprietary information, including in the event of unauthorized use or disclosure of such information. We also seek to preserve the integrity and confidentiality of our trade secrets and confidential information by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in the measures we take to protect and preserve our trade secrets, such measures can be breached, and we may not have adequate remedies for any such breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. For more information regarding the risks related to intellectual property, please see "Risk Factors—Risks related to intellectual property."

# Our program-specific patent portfolio

Our patent portfolio is directed to small molecules, platform methodologies, and related technology. We seek patent protection for product candidates, development programs, and related alternatives by filing and prosecuting patent applications in the United States and other countries, as appropriate.

We own and co-own patent applications related to our SHP2 development program. As of September 30, 2019, our patent portfolio related to this program consists of ownership or co-ownership rights to three pending U.S. non-provisional patent applications, six pending applications under the Patent Cooperation Treaty, or PCT, and approximately 57 pending patent applications in other jurisdictions, including without limitation major markets such as Brazil, Canada, China, Europe, Japan, Mexico and South Korea, within eight total patent families that include patent applications covering compositions of matter or methods of using our clinical candidate, RMC-4630, alone or in combination with certain other therapeutic agents. The single co-owned patent family is co-owned with The University of California, San Francisco, or UCSF. Any patents issuing from these patent applications would have nominal expiration dates ranging from 2037 to 2039, without accounting for any applicable patent term adjustments or extensions. All but the single UCSF co-owned family is exclusively licensed to our SHP2 collaborator, Sanofi, under the Sanofi Agreement.

We own or exclusively license patents and patent applications related to our 4EBP1/mTORC1 development program. As of September 30, 2019, our patent portfolio related to this program consists of ownership or the exclusive license of rights to one issued U.S. patent, two pending U.S. non-provisional patent applications, three pending PCT applications and nine pending patent applications in other jurisdictions, including without limitation major markets such as Canada, China, Europe, Japan and Mexico, within four total patent families that include filings covering compositions of matter or methods of using our development candidate, RMC-5552, alone or in combination with certain other therapeutic agents. The single exclusively licensed patent family is licensed from UCSF. The issued patent has, and any patents issuing from these patent applications would have, nominal expiration dates ranging from 2035 to 2039, without accounting for any applicable patent term adjustments or extensions.

We own patents and patent applications related to our RAS tri-complex inhibitors and related platform technology. As of September 30, 2019, our patent portfolio related to this program consists of ownership rights to four issued U.S. patents, four pending U.S. non-provisional patent applications, two pending PCT applications and approximately nine pending patent applications in other jurisdictions, including without limitation major markets such as Canada, Europe and Japan, within six total patent families that include filings covering compositions of matter, methods of using those compositions alone or in combination with certain other therapeutic agents, or aspects pertaining to our tri-complex approach to RAS inhibition. The issued patents have, and any patents issuing from these patent applications would have, nominal expiration dates ranging from 2031 to 2038, without accounting for any applicable patent term adjustments or extensions.

# **Government regulation**

The FDA and other regulatory authorities at federal, state, and local levels, as well as in foreign countries, extensively regulate, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, marketing and promotion, distribution, post-approval monitoring and reporting, sampling, and import and export of products, such as those we are developing. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

### U.S. drug regulation

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations. FDA approval is required before any new unapproved drug can be marketed in the United States. Drugs are also subject to other federal, state and local statutes and regulations. Failure to comply with applicable FDA or other requirements may subject a company to a variety of administrative or judicial sanctions, such as FDA clinical holds, refusal to approve pending applications, withdrawal of an

approval, warning or untitled letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties and criminal prosecution.

The process required by the FDA before product candidates may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests and animal studies, where all supporting safety and toxicity studies are performed in accordance with the FDA's Good Laboratory Practice, or GLP, regulations;
- manufacture of clinical drug supply in accordance with FDA's current Good Manufacturing Practice, or cGMP, regulations, when required;
- submission to the FDA of an investigational new drug application, or IND, which must become effective before human clinical studies may begin and must be updated annually or when significant changes are made;
- approval by an independent institutional review board, or IRB, representing each clinical site before a clinical study may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with good clinical practice, or GCP, regulations to establish the safety and efficacy of the product candidate for each proposed indication;
- · preparation of and submission to the FDA of a NDA;
- a determination by the FDA within 60 days of its receipt of an NDA to file the application for review;
- · satisfactory completion of an FDA advisory committee review, if applicable;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility(ies) where the product is manufactured to assess
  compliance with current good manufacturing practice, or cGMP, regulations, and of selected clinical investigation sites to assess
  compliance with GCP; and
- FDA review and approval of an NDA to permit commercial marketing of the product for its particular labeled uses in the United States.

### Preclinical and clinical studies

The preclinical and clinical testing and approval process can take many years and the actual time required to obtain approval, if any, may vary substantially based upon the type, complexity and novelty of the product or condition being treated.

Preclinical tests include laboratory (*in vitro*) evaluation of product chemistry, formulation and toxicity, as well as animal (*in vivo*) studies to assess the characteristics and potential safety and efficacy of the product. The conduct of preclinical tests that provide safety and toxicological information must comply with federal regulations and requirements, including GLP. The results of preclinical testing are submitted to the FDA as part of an IND along with other information, including information about product chemistry, manufacturing and controls (CMC) and any available human data or literature to support use of the product in humans. Long-term preclinical tests, such as animal tests of reproductive toxicity and carcinogenicity, may continue after the IND is submitted.

The central focus of an IND submission is on the general investigational plan and the protocol(s) for human studies. An IND must become effective before human clinical trials may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to the proposed clinical studies. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before clinical studies can begin.

For each successive clinical trial conducted with the investigational drug, a separate, new protocol submission to an existing IND must be made, along with any subsequent changes to the investigational plan. Sponsors are also subject to ongoing reporting requirements, including submission of IND safety reports for any serious adverse experiences associated with use of the investigational drug or findings from preclinical studies suggesting a significant risk for human subjects, as well as IND annual reports on the progress of the investigations conducted under the IND.

Clinical studies involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for participation in each clinical study. Clinical studies are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the efficacy criteria to be evaluated. A protocol for each clinical study and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Additionally, approval must also be obtained from each clinical study site's IRB before a study may be initiated at the site, and the IRB must monitor the study until completed. Sponsors of clinical trials generally must register and report ongoing clinical studies and clinical study results to public registries, including the website maintained by the U.S. National Institutes of Health, ClinicalTrials.gov.

For purposes of NDA approval, human clinical trials are typically divided into three or four phases. Although the phases are usually conducted sequentially, they may overlap or be combined.

- Phase 1. The drug is initially introduced into healthy human subjects or into patients with the target disease or condition. These studies are designed to evaluate the safety, dosage tolerance, metabolism and pharmacologic actions of the drug in humans, the side effects associated with increasing doses, and if possible, to gain early evidence on effectiveness.
- Phase 2. The drug is administered to a limited patient population to evaluate tolerance and optimal dose, identify possible adverse side effects and safety risks, and preliminarily evaluate efficacy. Multiple Phase 2 trials may be conducted to obtain additional data prior to beginning Phase 3 trials.
- Phase 3. The drug is administered to an expanded patient population, generally at geographically dispersed clinical study sites to
  generate enough data to statistically evaluate dosage, clinical effectiveness and safety, to establish the overall benefit-risk relationship of
  the investigational product and to provide an adequate basis for product approval.
- Phase 4. In some cases, the FDA may condition approval of an NDA for a product candidate on the sponsor's agreement to conduct additional clinical studies after approval. In other cases, a sponsor may voluntarily conduct additional clinical studies after approval to gain more information about the drug. Such post-approval studies are typically referred to as Phase 4 clinical studies.

The FDA, the IRB or the clinical study sponsor may suspend or terminate a clinical study at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. The sponsor may also suspend or terminate a clinical study based on evolving business objectives and/or competitive climate.

Concurrent with clinical trials, companies may complete additional *in vivo* studies and develop additional information about the characteristics of the product candidate. Companies must also finalize a process for manufacturing the product in commercially applicable quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product and, among other things, must use validated methods for testing the product against specifications to confirm its identity, strength, quality and purity. Additionally, appropriate packaging must be selected and tested and stability

studies must be conducted to demonstrate that the product does not undergo unacceptable deterioration over its shelf life.

### Submission of an NDA to the FDA

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development and testing are submitted to the FDA in the form of an NDA requesting approval to market the product for one or more indications. The submission of an NDA requires payment of a substantial application user fee to the FDA, unless a waiver or exemption applies.

An NDA must include all relevant data available from pertinent preclinical and clinical studies, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls and proposed labeling, among other things. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the investigational product to the satisfaction of the FDA.

The FDA has 60 days from its receipt of an NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that it is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept an application for filing. In this event, the application must be resubmitted with the additional information and is subject to payment of additional user fees. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. Under applicable Prescription Drug User Fee Act, or PDUFA, performance goals, the FDA endeavors to review applications subject to standard review within ten to twelve months, and to review applications subject to priority review within six to eight months, depending on whether the drug is a new molecular entity.

The FDA may refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee for review, evaluation and recommendation as to whether the application should be approved and under what conditions.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, the FDA will typically inspect one or more clinical sites to assure that relevant study data was obtained in compliance with GCP requirements.

After the FDA evaluates the NDA and conducts inspections of manufacturing facilities, it may issue an approval letter or a complete response letter. A complete response letter indicates that the review cycle of the application is complete and the application is not ready for approval. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. Even with submission of this additional information, the FDA may ultimately decide that an application does not satisfy the regulatory criteria for approval. If, or when, the deficiencies have been addressed to the FDA's satisfaction in a resubmission of the application, the FDA will issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

As a condition of NDA approval, the FDA may require a Risk Evaluation and Mitigation Strategy, or REMS, program to help ensure that the benefits of the drug outweigh its risks. If the FDA determines a REMS program

is necessary during review of the application, the drug sponsor must agree to the REMS plan at the time of approval. A REMS program may be required to include various elements, such as a medication guide or patient package insert, a communication plan to educate healthcare providers of the drug's risks, or other elements to assure safe use, such as limitations on who may prescribe or dispense the drug, dispensing only under certain circumstances, special monitoring and the use of patient registries. In addition, all REMS programs must include a timetable to periodically assess the strategy following implementation.

Further, product approval may require substantial post-approval testing and surveillance to monitor the drug's safety and efficacy, and the FDA has the authority to prevent or limit further marketing of a product based on the results of these post-marketing programs. Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing. Moreover, changes to the conditions established in an approved application, including changes in indications, labeling or manufacturing processes or facilities may require submission and FDA approval of a new NDA or NDA supplement before the changes can be implemented. An NDA supplement for a new indication typically requires clinical data similar to that supporting the original approval, and the FDA uses similar procedures in reviewing supplements as it does in reviewing original applications.

### Expedited development and review programs

The FDA offers a number of expedited development and review programs for qualifying product candidates, one or more of which may be available for our current or future products.

New drug products are eligible for fast track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. The sponsor of a fast track product has opportunities for frequent interactions with the review team during product development and, once an NDA is submitted, the product may be eligible for priority review. A fast track product may also be eligible for rolling review, where the FDA may consider for review sections of the NDA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA.

A product intended to treat a serious or life-threatening disease or condition may also be eligible for breakthrough therapy designation to expedite its development and review. A product can receive breakthrough therapy designation if preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the fast track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product, including involvement of senior managers.

After an NDA is submitted for a product, including a product with a fast track designation and/or breakthrough therapy designation, the NDA may be eligible for priority review. A product is eligible for priority review if it has the potential to provide a significant improvement in the treatment, diagnosis or prevention of a serious disease or condition compared to marketed products. Depending on whether a drug contains a new molecular entity, priority review designation means the FDA's goal is to take an action on the marketing application within six to eight months of the 60-day filing date, compared with ten to twelve months under standard review.

Additionally, products studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive accelerated approval upon a determination that the product has an effect on a

surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of accelerated approval, the FDA will generally require the sponsor to perform adequate and well-controlled post-marketing clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

### Orphan drug designation

We intend to pursue orphan drug designation with respect to oncology indications, as appropriate, with the potential to obtain orphan drug exclusivity for our products, if approved.

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States for which there is no reasonable expectation that the cost of developing and making available in the United States a drug for this type of disease or condition will be recovered from sales in the United States for that drug. Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. The orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusive approval (or exclusivity), which means that the FDA may not approve any other applications, including a full NDA, to market the same drug for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity. Orphan drug exclusivity does not prevent the FDA from approving a different drug for the same disease or condition, or the same drug for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the application user fee.

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. In addition, 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 quantities of the product to meet the needs of patients with the rare disease or condition.

### Pediatric information and pediatric exclusivity

Under the Pediatric Research Equity Act, or PREA, certain NDAs and certain supplements to an NDA must contain data to assess the safety and efficacy of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of pediatric data or full or partial waivers. The Food and Drug Administration Safety and Innovation Act, or FDASIA, amended the FDCA to require that a sponsor who is planning to submit a marketing application for a drug that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or iPSP, within 60 days of an end-of-Phase 2 meeting or, if there is no such meeting, as early as practicable before the initiation of a Phase 3 or Phase 2/3 study. The iPSP must include an outline of

the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach an agreement on the iPSP. A sponsor can submit amendments to an agreed-upon iPSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical trials and/or other clinical development programs.

A drug product can also obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued "Written Request" for such a study.

### Post-approval requirements

Once an NDA is approved, a product will be subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to drug listing and registration, recordkeeping, periodic reporting, product sampling and distribution, adverse event reporting and advertising, marketing and promotion. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved labeling. While physicians may prescribe for off-label uses, manufacturers may only promote for the approved indications and in accordance with the provisions of the approved label. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA approved labeling. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing user fee requirements, under which FDA assesses an annual program fee for each product identified in an approved NDA. In addition, quality-control, drug manufacture, packaging and labeling procedures must continue to conform to cGMPs after approval. Drug manufacturers and certain of their subcontractors are required to register their establishments with the FDA and certain state agencies. Registration with the FDA subjects entities to periodic unannounced and announced inspections by the FDA and these state agencies, during which the agency inspects manufacturing facilities to assess compliance with cGMPs. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

The FDA may withdraw approval of a product if compliance with regulatory requirements is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

· restrictions on the marketing or manufacturing of a product, complete withdrawal of the product from the market or product recalls;

- fines, warning or untitled letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of existing product approvals;
- · product seizure or detention, or refusal of the FDA to permit the import or export of products; or
- · injunctions or the imposition of civil or criminal penalties.

The FDA may also require post-approval studies and clinical trials if the FDA finds that scientific data, including information regarding related drugs, deem it appropriate. The purpose of such studies would be to assess a known serious risk or signals of serious risk related to the drug or to identify an unexpected serious risk when available data indicate the potential for a serious risk. The FDA may also require a labeling change if it becomes aware of new safety information that it believes should be included in the labeling of a drug.

### International regulation

In addition to regulations in the United States, we could become subject to a variety of foreign regulations regarding development, approval, commercial sales and distribution of our products if we seek to market our product candidates in other jurisdictions. Whether or not we obtain FDA approval for a product, we must obtain the necessary approvals by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country and can involve additional product testing and additional review periods, and the time may be longer or shorter than that required to obtain FDA approval. The requirements governing, among other things, the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others. If we fail to comply with applicable foreign regulatory requirements, we may be subject to fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

### Other healthcare laws

Pharmaceutical companies are subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. Such laws include, without limitation, U.S. federal and state anti-kickback, fraud and abuse, false claims, consumer fraud, pricing reporting, data privacy and security, and transparency laws and regulations as well as similar foreign laws in jurisdictions outside the U.S.

For example, the federal Anti-Kickback Statute prohibits, among other things, individuals or entities from knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, overtly or covertly, in cash or in kind to induce or in return for purchasing, leasing, ordering or arranging for or recommending the purchase, lease or order of any item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. A person or entity does not need to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act and the civil monetary penalties statute. The federal civil and criminal false claims laws, including the civil False Claims Act, prohibit, among other things, any individual or entity from knowingly presenting, or causing to be presented, a false claim for payment to the federal government or knowingly making, using or causing to be made or used a false record or statement material to a

false or fraudulent claim to the federal government. The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, created additional federal civil and criminal statutes that prohibit, among other things, knowingly and willfully executing a scheme to defraud any healthcare benefit program. Similar to the U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the healthcare fraud statute implemented under HIPAA or specific intent to violate it in order to have committed a violation. The federal Physician Payments Sunshine Act requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to report annually to CMS information related to payments or other transfers of value made to physicians and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by physicians and their immediate family members.

Similar state and local laws and regulations may also restrict business practices in the pharmaceutical industry, such as state anti-kickback and false claims laws, which may apply to business practices, including but not limited to, research, distribution, sales and marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, or by patients themselves; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information or which require tracking gifts and other remuneration and items of value provided to physicians, other healthcare providers and entities; state and local laws that require the registration of pharmaceutical sales representatives; and state and local laws governing the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts. Violation of any of such laws or any other governmental regulations that apply may result in penalties, including, without limitation, civil and criminal penalties, damages, fines, additional reporting obligation, the curtailment or restructuring of operations, exclusion from participation in governmental healthcare programs and individual imprisonment.

### Data privacy and security laws

Pharmaceutical companies may be subject to U.S. federal and state health information privacy, security and data breach notification laws, which may govern the collection, use, disclosure and protection of health-related and other personal information. State laws may be more stringent, broader in scope or offer greater individual rights with respect to protected health information, or PHI, than HIPAA and state laws may differ from each other, which may complicate compliance efforts. Entities that are found to be in violation of HIPAA as the result of a breach of unsecured PHI, a complaint about privacy practices or an audit by the Department of Health and Human Services, or HHS, may be subject to significant civil, criminal and administrative fines and penalties and/or additional reporting and oversight obligations if required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance. In addition, California enacted the California Consumer Privacy Act, or CCPA, which creates individual privacy rights for California consumers and increases the privacy and security obligations of entities handling certain personal data. The CCPA went into effect on January 1, 2020, and the California Attorney General may bring enforcement actions for violations beginning July 1, 2020. The CCPA has been amended from time to time, and it remains unclear what, if any, further modifications will be made to this legislation or how it will be interpreted.

European Union member states, the United Kingdom, Switzerland and other jurisdictions have also adopted data protection laws and regulations, which impose significant compliance obligations. In the European Economic Area, or EEA, and the United Kingdom, the collection and use of personal data, including clinical trial

data, is governed by the provisions of the General Data Protection Regulation, or GDPR. The GDPR became effective on May 25, 2018, repealing its predecessor directive and increasing responsibility and liability of pharmaceutical companies in relation to the processing of personal data of EU data subjects. The GDPR, together with national legislation, regulations and guidelines of the EU member states and the United Kingdom governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, analyze, store, transfer and otherwise process personal data, including health data from clinical trials and adverse event reporting. In particular, the GDPR includes obligations and restrictions concerning the consent of the individuals to whom the personal data relates, the information provided to such individuals, the transfer of personal data out of the EEA or the United Kingdom, security breach notifications, security and confidentiality of the personal data and imposition of substantial potential fines for breaches of the data protection obligations. European data protection authorities may interpret the GDPR and national laws differently and impose additional requirements, which add to the complexity of processing personal data in or from the EEA or United Kingdom. Guidance on implementation and compliance practices are often updated or otherwise revised.

### Coverage and reimbursement

Sales of any pharmaceutical product depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state and foreign government healthcare programs, commercial insurance and managed healthcare organizations, and the level of reimbursement for such product by third-party payors. Significant uncertainty exists as to the coverage and reimbursement status of any newly approved product. Decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. One third-party payor's decision to cover a particular product does not ensure that other payors will also provide coverage for the product. As a result, the coverage determination process can require manufacturers to provide scientific and clinical support for the use of a product to each payor separately and can be a time-consuming process, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

In addition, third-party payors are increasingly reducing reimbursements for pharmaceutical products and services. The U.S. government and state legislatures have continued implementing cost-containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products. Third-party payors are more and more challenging the prices charged, examining the medical necessity and reviewing the cost effectiveness of pharmaceutical products, in addition to questioning their safety and efficacy. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit sales of any product. Decreases in third-party reimbursement for any product or a decision by a third-party payor not to cover a product could reduce physician usage and patient demand for the product.

In international markets, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. Pharmaceutical products may face competition from lower-priced products in foreign countries that have placed price controls on pharmaceutical products and may also compete with imported foreign products. Furthermore, there is no assurance that a product will be considered medically reasonable and necessary for a specific indication, will be considered cost-effective by third-party payors, that an adequate level of

reimbursement will be established even if coverage is available or that the third-party payors' reimbursement policies will not adversely affect the ability for manufacturers to sell products profitably.

### Healthcare reform

In the United States and certain foreign jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system. In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively the ACA, was signed into law, which substantially changed the way healthcare is financed by both governmental and private insurers in the United States. The ACA contains a number of provisions, including those governing enrollment in federal healthcare programs, reimbursement adjustments and fraud and abuse changes. Additionally, the ACA increased the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1%; required collection of rebates for drugs paid by Medicaid managed care organizations; imposed a non-deductible annual fee on pharmaceutical manufacturers or importers who sell certain "branded prescription drugs" to specified federal government programs; expanded eligibility criteria for Medicaid programs; created a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and established a Center for Medicare Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the ACA, and we expect there will be additional challenges and amendments to the ACA in the future. For example, in 2017, Congress enacted the Tax Cuts and Jobs Act, which eliminated 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 U.S. District Court Judge in the Northern District of Texas, or the Texas District Court Judge, ruled that the individual mandate is a critical and inseverable feature of the ACA, and therefore, because it was repealed as part of the Tax Cuts and Jobs Act, the remaining provisions of the ACA are invalid as well. While the Texas U.S. District Court Judge, as well as the Trump Administration and CMS, have stated that the ruling will have no immediate effect, and on December 30, 2018 the Texas District Court Judge issued an order staying the judgment pending appeal, it is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the ACA will impact the ACA.

Other legislative changes have been proposed and adopted since the ACA was enacted, including aggregate reductions of Medicare payments to providers of 2% per fiscal year and reduced payments to several types of Medicare providers, which will remain in effect through 2027 absent additional congressional action. Moreover, there has recently been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed and enacted legislation designed, among other things, to bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs and reform government program reimbursement methodologies for pharmaceutical products. Individual states in the United States have also become increasingly active in implementing regulations designed to control pharmaceutical 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, mechanisms to encourage importation from other countries and bulk purchasing. Furthermore, there has been increased interest by third party payors and governmental authorities in reference pricing systems and publication of discounts and list prices.

# **Employees**

As of September 30, 2019, we had 90 full-time employees. 50 of our employees have M.D. or Ph.D. degrees. Within our workforce, 74 employees are engaged in research and development and 16 are engaged in business development, finance, legal, and general management and administration. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

### **Facilities**

Our corporate headquarters is located in Redwood City, California, where we lease and occupy approximately 42,000 square feet of office and laboratory space. The current term of our Redwood City lease expires in April 2023, with an option to extend the term through January 2028.

We sublease approximately 3,000 square feet of additional laboratory space in Redwood City, California from OncoMed Pharmaceuticals, Inc. The current term of this sublease expires in January 2020 and can be extended on a month-to-month basis.

We also lease approximately 22,000 square feet of office and laboratory space in Cambridge, Massachusetts. The current term of our Cambridge lease expires in February 2023, with an option to extend the term through February 2028, subject to certain conditions. We have subleased this office and laboratory space to Casma Therapeutics, Inc. The current term of this sublease expires in February 2023.

We believe our existing facilities are sufficient for our needs for the foreseeable future. To meet the future needs of our business, we may lease additional or alternate space, and we believe suitable additional or alternative space will be available in the future on commercially reasonable terms.

# Legal proceedings

From time to time, we may become involved in litigation or other legal proceedings. We are not currently a party to any litigation or legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on our business, financial condition, results of operations and prospects because of defense and settlement costs, diversion of management resources and other factors.

# Management

# **Executive officers and directors**

The following table sets forth information regarding our executive officers and directors as of September 30, 2019:

Name	Age	Position(s)
Executive Officers and Employee Director	•	. ,
Mark A. Goldsmith, M.D., Ph.D.	57	President, Chief Executive Officer and Director
Steve Kelsey, M.D., FRCP, FRCPath	58	President, Research and Development
Margaret Horn, J.D.	57	Chief Operating Officer and General Counsel
Key Employees		
Jack Anders	43	Vice President, Finance and Principal Accounting Officer
Non-Employee Directors		
Elizabeth McKee Anderson	62	Director
Alexis Borisy	47	Director
Neil Exter	61	Director
Larry Lasky, Ph.D.	68	Director
Vincent A. Miller, M.D.	57	Director
Thilo Schroeder, Ph.D.	38	Director
Barbara Weber, M.D.	63	Director

# **Executive officers and employee director**

Mark A. Goldsmith, M.D., Ph.D. has served as a member of our board of directors and as our President and Chief Executive Officer since November 2014. Since 2009, Dr. Goldsmith has served as a member of the board of directors of Constellation Pharmaceuticals, Inc., a biopharmaceutical company, where he also served as President and Chief Executive Officer from 2009 to 2012, as Chairman from 2012 to June 2016 and from March 2017 to present, and as Interim Executive Chairman from June 2016 to March 2017. Dr. Goldsmith was previously a Partner with Third Rock Ventures, a life sciences venture capital firm, from 2013 to 2015, and a Venture Partner with Third Rock from 2012 to 2013. Dr. Goldsmith served as President and Chief Executive Officer and as a member of the board of directors of Global Blood Therapeutics, a biopharmaceutical company, from 2012 to 2014. Dr. Goldsmith also served as President and Chief Executive Officer of Nurix, Inc., a drug discovery company, from 2012 to 2014. Before entering the private sector, Dr. Goldsmith led a medical research laboratory at the Gladstone Institute of Virology and Immunology, practiced medicine on the faculty of the School of Medicine of the University of California, San Francisco and the San Francisco General Hospital, and was a consultant to leading pharmaceutical and biotechnology companies. Dr. Goldsmith received an A.B. from Princeton University in Biology and an M.D. and Ph.D. in Microbiology and Immunology from the School of Medicine of the University of California, San Francisco. We believe that Dr. Goldsmith's role as our President and Chief Executive Officer together with his extensive experience as an executive and director of several companies in the biopharmaceutical and biotechnology industry, his extensive knowledge of our company, his experience as a venture capital investor in the life sciences industry and his educational background provide him with the qualifications and skills necessary to serve as a member of our board of directors.

Steve Kelsey, M.D., FRCP, FRCPath has served as our President, Research and Development since March 2017. Previously, Dr. Kelsey served as President of Onkaido Therapeutics, a Moderna venture biopharmaceutical company, from 2014 to March 2017. Dr. Kelsey also served as Senior Vice President, New Projects at Medivation, a biopharmaceutical company, from 2013 to 2014. From 2009 to 2013, Dr. Kelsey served as Executive Vice President, Research and Development, and Chief Medical Officer at Geron Corporation, a biopharmaceutical company. Dr. Kelsey received a B.S.c in Pharmacology, an M.B. Ch.B. in Medicine and an M.D. from the University of Birmingham, U.K.

Margaret Horn, J.D. has served as our Chief Operating Officer since October 2018 and our General Counsel since December 2014 and previously served as our Executive Vice President from December 2014 to October 2018. Prior to joining us, Ms. Horn served as Chief Operating Officer at ProLynx LLC from 2010 to December 2014. Ms. Horn received a B.S. in Pharmacy from the University of the Sciences in Philadelphia and a J.D. from Villanova University Charles Widger School of Law.

# Key employees

**Jack Anders** has served as our Vice President, Finance since August 2018. Prior to joining us, Mr. Anders served in various roles at Depomed, Inc. from 2006 to July 2018, including most recently as Vice President, Finance from 2013 to 2018. Mr. Anders received a B.A. in Economics with an emphasis in Accounting from the University of California, Los Angeles and is a former certified public accountant.

# Non-employee directors

Elizabeth McKee Anderson has served as member of our board of directors since March 2015. Ms. Anderson has served as a member of the board of directors of BioMarin Pharmaceutical, a biotechnology company, since July 2019. Since November 2018, Ms. Anderson has served as a member of the board of directors of Insmed Incorporated, a biopharmaceutical company. Ms. Anderson has also served as a member of the board of directors of Huntsworth PLC, a healthcare communications group, since January 2018 and Bavarian Nordic A/S, a biotechnology company, since April 2017. Ms. Anderson previously served in various roles at Janssen Pharmaceuticals, Inc., a Johnson & Johnson company focusing on pharmaceuticals, from 2003 to 2014, most recently as Worldwide Vice President, Commercial Leader, Infectious Diseases and Vaccines, from 2012 to 2014 and Worldwide Vice President, Global Strategic Marketing and Market Access, Vaccines from 2009 to 2012. Prior to that, Ms. Anderson served as Vice President and General Manager for Wyeth Lederle Vaccines, a pharmaceutical company. Ms. Anderson received a B.Eng. in Engineering and Technical Management from Rutgers, The State University of New Jersey-New Brunswick and an M.B.A. in Finance from Loyola University of Maryland. We believe that Ms. Anderson's extensive experience in biotechnology and pharmaceutical companies and in serving on the boards of directors of biopharmaceutical and life sciences companies provides her with the qualifications and skills necessary to serve as a member of our board of directors.

Alexis Borisy has served as a member of our board of directors since November 2014. From 2010 to June 2019, Mr. Borisy was a Partner at Third Rock Ventures. Since June 2015, Mr. Borisy has served as a member of the board of directors of Magenta Therapeutics, Inc., a biopharmaceutical company. Mr. Borisy co-founded Blueprint Medicines Corporation, a biopharmaceutical company, and served as its Interim Chief Executive Officer from 2013 to 2014 and has served as a member of its board of directors since 2011. Mr. Borisy co-founded Foundation Medicine, Inc., or Foundation Medicine, a biotechnology company, where he served as its Interim Chief Executive Officer from 2009 to 2011 and served as a member of its board of directors from 2009 to July 2018, including as Chairman from 2011 to February 2017. Mr. Borisy previously served as a member of the board of directors of Editas Medicine, Inc., a pharmaceutical company, from 2013 to March 2018. Mr. Borisy received an A.B. in Chemistry from the University of Chicago and an A.M. in Chemistry and Chemical

Biology from Harvard University. We believe Mr. Borisy's extensive experience as an executive of, and working with and serving on the boards of directors of, multiple biopharmaceutical and life sciences companies, his educational background and his experience working in the venture capital industry provide him with the qualifications and skills necessary to serve as a member of our board of directors.

Neil Exter has served as a member of our board of directors during his current term since July 2019. Mr. Exter previously served as a member of our board of directors from November 2014 to March 2016. Mr. Exter has been a Partner at Third Rock Ventures since 2007. Prior to joining Third Rock Ventures, Mr. Exter was Chief Business Officer of Alantos Pharmaceuticals from 2006 until its acquisition by Amgen in 2007. Previously, he served as Vice President of Business Development for Millennium Pharmaceuticals from 2002 to 2006. Mr. Exter previously served as a member of the boards of directors of CytomX Therapeutics, a biopharmaceutical company, from December 2010 to December 2017, and Rhythm Pharmaceuticals, a biopharmaceutical company, from 2014 to June 2019. He is a member of the Research Committee of Children's Hospital Boston, the investment committee of the Innovation Research Fund at Partners Healthcare, and the board of directors of the New England Venture Capital Association. Mr. Exter received a B.S. from Cornell University, an M.S. from Stanford University, and an M.B.A. as a Baker Scholar from Harvard Business School. We believe that Mr. Exter's extensive experience as a venture capital investor in, and director of, several biotechnology companies, provides him with the qualifications and skills necessary to serve as a member of our board of directors.

Larry Lasky, Ph.D. has served as a member of our board of directors since December 2016. Since May 2014, Dr. Lasky has served as a Partner at The Column Group, a healthcare venture capital firm. Dr. Lasky served as a member of the board of directors of OncoMed Pharmaceuticals, Inc., a biopharmaceutical company, from 2004 to June 2018. From 2007 to May 2014, Dr. Lasky was a Partner of U.S. Venture Partners, a venture capital firm, focusing on investments in biotechnology companies. From 2002 to 2007, Dr. Lasky was a General Partner of Latterell Venture Partners, a healthcare venture capital firm that he co-founded. From 1982 to 2002, Dr. Lasky was a leading scientist at Genentech, where he attained the position of Genentech Fellow. Dr. Lasky received a B.A. in Music and Molecular Biology and a Ph.D. in Molecular Biology from the University of California, Los Angeles. We believe that Dr. Lasky's scientific expertise in biotechnology, and his extensive experience as a venture capital investor in, and director of, biotechnology companies, provide him with the qualifications and skills necessary to serve as a member of our board of directors.

Vincent A. Miller, M.D. has served as a member of our board of directors since September 2017. Since April 2019, Dr. Miller has served as a Strategic Advisor to Foundation Medicines. Previously, Dr. Miller served as Foundation Medicine's Senior Vice President, Clinical Development from 2011 to 2013 and served as Foundation Medicine's Chief Medical Officer from 2013 to April 2019. From 1991 to 2011, Dr. Miller served as an Attending Physician at Memorial Sloan-Kettering Cancer Center. Since 2011, Dr. Miller has served as a Consulting Physician, at Memorial Sloan-Kettering Cancer Center. Dr. Miller received a B.A. from the University of Pennsylvania in Mathematics and an M.D. from the University of Medicine and Dentistry of New Jersey in Newark. We believe that Dr. Miller's experience in the biotechnology industry, his extensive experience practicing medicine and his educational background provide him with the qualifications and skills necessary to serve as a member of our board of directors.

**Thilo Schroeder, Ph.D.** has served as a member of our board of directors since March 2018. Since 2012, Dr. Schroeder has been a Partner at Nextech Invest Ltd., or Nextech, a venture capital fund focused on investing in oncology companies. Since January 2018, Dr. Schroeder has served as a member of the board of directors of IDEAYA Biosciences, Inc., an oncology-focused biotechnology company. He also serves as a member of the board of directors of ImaginAB, Inc., an immune-oncology imaging company. Dr. Schroeder also served as a member of the board of directors of Blueprint Medicines Corp., a biopharmaceutical company, from 2014 to May 2015. Prior to joining Nextech in 2012, Dr. Schroeder worked in research specializing on the development of

Designed Ankyrin Repeat Proteins (DARPins) as specific protein inhibitors from 2007 to 2012. Dr. Schroeder received a B.S. in Biology from the Technical University of Darmstadt in Germany, an M.S. in Biotechnology from the École de Supérieure de Biotechnologie de Strasbourg in France, and a Ph.D. in Biochemistry from the University of Zurich in Switzerland. We believe that Dr. Schroeder's educational background, his experience as a board member of biotechnology and pharmaceutical companies, and his experience as an investor in life sciences companies provide him with the qualifications and skills necessary to serve as a member of our board of directors.

Barbara Weber, M.D. has served as a member of our board of directors since April 2018. Since September 2017, Dr. Weber has served as the President and Chief Executive Officer of Tango Therapeutics, Inc., a biotechnology company. Dr. Weber has been a Venture Partner at Third Rock Ventures since March 2015 and from April 2015 to September 2017 she served as Interim Chief Executive Officer at Neon Therapeutics, Inc., a biotechnology company. From 2009 to February 2015, Dr. Weber served as Senior Vice President, Oncology Translation Medicine at Novartis. Dr. Weber received a B.S. in Chemistry from the University of Washington and an M.D. from the University of Washington School of Medicine and was a resident in internal medicine at Yale University. We believe that Dr. Weber's experience as an officer and director of other biotechnology companies and her educational background provide her with the qualifications and skills necessary to serve as a member of our board of directors.

# **Board composition**

# Director independence

Our board of directors currently consists of eight members. Our board of directors has determined that all of our directors, other than Dr. Goldsmith, qualify as "independent" directors in accordance with the Nasdaq Global Market listing requirements. Dr. Goldsmith is not considered independent because he is an employee of Revolution Medicines, Inc. The Nasdaq Global Market's independence definition includes a series of objective tests, such as that the director is not, and has not been for at least three years, one of our employees and that neither the director nor any of his or her family members has engaged in various types of business dealings with us. In addition, as required by the Nasdaq Global Market rules, our board of directors has made a subjective determination as to each independent director that no relationship exists that, in the opinion of our board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. In making these determinations, our board of directors reviewed and discussed information provided by the directors and us with regard to each director's business and personal activities and relationships as they may relate to us and our management. There are no family relationships among any of our directors or executive officers.

### Classified board of directors

In accordance with our amended and restated certificate of incorporation to be in effect immediately prior to the consummation of this offering, our board of directors will be divided into three classes with staggered, three-year terms. At each annual meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election.

Effective upon the consummation of this offering, we expect that our directors will be divided among the three classes as follows:

 the Class I directors will be , and , and their terms will expire at the annual meeting of stockholders to be held in ;

•	the Class II directors will be held in ; and	,	and	, and their terms will expire at the annual meeting of stockholders to be
•	the Class III directors will be		and	, and their terms will expire at the annual meeting of stockholders to be

the Class III directors will be , and , and their terms will expire a held in ...

Our amended and restated certificate of incorporation will provide that the authorized number of directors may be changed only by resolution of the board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our management or a change in control of our company.

### Voting arrangements

In June 2019, we entered into an Amended and Restated Voting Agreement, or the Voting Agreement, with certain holders of our capital stock, including certain members of, and affiliates of, our board of directors and certain of our executive officers.

Pursuant to the Voting Agreement, each of Third Rock Ventures, The Column Group and Nextech has the right to designate one member to be elected to our board of directors. The Voting Agreement will terminate by its terms in connection with the closing of this offering and none of our stockholders will have any continuing rights regarding the election or designation of members of our board of directors following this offering.

# Leadership structure of the board

Our amended and restated bylaws and corporate governance guidelines to be in place immediately prior to the consummation of this offering provide our board of directors with flexibility to combine or separate the positions of Chair of the board of directors and Chief Executive Officer and to implement a lead director in accordance with its determination that utilizing one or the other structure would be in the best interests of our company.

presides over the executive sessions of the board of directors and acts as a liaison between management and the board of directors.

Our board of directors has concluded that our current leadership structure is appropriate at this time. However, our board of directors will continue to periodically review our leadership structure and may make such changes in the future as it deems appropriate.

# Role of board in risk oversight process

Risk assessment and oversight are an integral part of our governance and management processes. Our board of directors encourages management to promote a culture that incorporates risk management into our corporate strategy and day-to-day business operations. Management discusses strategic and operational risks at regular management meetings, and conducts specific strategic planning and review sessions during the year that include a focused discussion and analysis of the risks facing us. Throughout the year, senior management reviews these risks with the board of directors at regular board meetings as part of management presentations that focus on particular business functions, operations or strategies, and presents the steps taken by management to mitigate or eliminate such risks.

Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through our board of directors as a whole, as well as through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. While

our board of directors is responsible for monitoring and assessing strategic risk exposure, our audit committee is responsible for overseeing our major financial risk exposures and the steps our management has taken to monitor and control these exposures. The audit committee also monitors compliance with legal and regulatory requirements and considers and approves or disapproves any related person transactions. Our nominating and corporate governance committee monitors the effectiveness of our corporate governance guidelines. Our compensation committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

### **Board committees**

### Audit committee

Our audit committee oversees our corporate accounting and financial reporting process. Among other matters, the audit committee:

- · appoints our independent registered public accounting firm;
- · evaluates the independent registered public accounting firm's qualifications, independence and performance;
- determines the terms of engagement of the independent registered public accounting firm;
- · reviews and approves the scope of the annual audit and the audit fee;
- discusses with management and the independent registered public accounting firm the results of the annual audit and the review of our quarterly financial statements;
- approves the retention of the independent registered public accounting firm to perform any proposed permissible non-audit services;
- monitors the rotation of partners of the independent registered public accounting firm on our engagement team in accordance with requirements established by the SEC;
- is responsible for reviewing our audited consolidated financial statements and our management's discussion and analysis of financial condition and results of operations to be included in our annual and quarterly reports to be filed with the SEC;
- · reviews our critical accounting policies and estimates;
- · reviews all related party transactions on an ongoing basis;
- establishes procedures for the receipt, retention and treatment of complaints received by us regarding accounting, internal controls or auditing matters;
- annually reviews and assesses treasury functions including cash management process;
- · discusses on a periodic basis, or as appropriate, with management, our policies and procedures with respect to risk assessment; and
- investigates any matters received, and reports to the Board periodically, with respect to ethics issues, complaints and associated investigations; and
- · reviews the audit committee charter and the committee's performance at least annually.

The current members of our audit committee are , and . serves as the chairperson of the committee. All members of our audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and the Nasdaq Global Market. Our board of directors has determined that is an audit committee financial expert as defined under the applicable rules of the SEC and has the requisite financial sophistication as defined under the applicable rules and regulations of the Nasdaq Global Market. Under the rules of the SEC, members of the audit committee must also meet heightened independence standards. Our board of directors has determined that each of the members of our audit committee are independent under the applicable rules of the SEC and the Nasdaq Global Market. The audit committee operates under a written charter that satisfies the applicable standards of the SEC and the Nasdaq Global Market.

### Compensation committee

Our compensation committee oversees policies relating to compensation and benefits of our officers and employees. Among other things, the compensation committee:

- reviews and approves or recommends corporate goals and objectives relevant to compensation of our executive officers, other than our Chief Executive Officer;
- evaluates the performance of our executive officers in light of those goals and objectives and approves the compensation of these officers based on such evaluations;
- reviews and approves or makes recommendations to our board of directors regarding the issuance of stock options and other awards under our stock plans to our executive officers, other than our Chief Executive Officer;
- reviews the performance of our Chief Executive Officer and makes recommendations to our board of directors with respect to his
  compensation and our board of directors retains the authority to make compensation decisions relative to our Chief Executive Officer;
- · evaluates compliance with applicable compensation rules, regulations and guidelines and other law, as applicable; and
- reviews the performance of the compensation committee and its members, including compliance by the compensation committee at least annually.

The current members of our compensation committee are , and . serves as the chair of the committee. Each of the members of our compensation committee is independent under the applicable rules and regulations of the Nasdaq Global Market and is a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act. The compensation committee operates under a written charter that satisfies the applicable standards of the SEC and the Nasdaq Global Market.

### Nominating and corporate governance committee

The nominating and corporate governance committee is responsible for making recommendations to our board of directors regarding candidates for directorships and the size and composition of our board of directors. In addition, the nominating and corporate governance committee is responsible for overseeing our corporate governance policies and reporting and making recommendations to our board of directors concerning governance matters. The current members of our nominating and corporate governance committee are , and . serves as the chair of the committee. Each of the members of our nominating and corporate governance committee is an independent director under the applicable rules and

regulations of the Nasdaq Global Market relating to nominating and corporate governance committee independence. The nominating and corporate governance committee operates under a written charter that satisfies the applicable standards of the SEC and the Nasdaq Global Market

# Compensation committee interlocks and insider participation

During the year ended December 31, 2018, our compensation committee consisted of Ms. Anderson, Mr. Borisy and Dr. Miller. None of the members of our compensation committee during 2018 nor any of the current members of our compensation committee has at any time been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers on our board of directors or compensation committee. For a description of transactions between us and members of our compensation committee and affiliates of such members, please see "Certain relationships and related party transactions."

# **Board diversity**

Upon consummation of this offering, our nominating and corporate governance committee will be responsible for reviewing with the board of directors, on an annual basis, the appropriate characteristics, skills and experience required for the board of directors as a whole and its individual members. In evaluating the suitability of individual candidates (both new candidates and current members), the nominating and corporate governance committee, in recommending candidates for election, and the board of directors, in approving (and, in the case of vacancies, appointing) such candidates, may take into account many factors, including but not limited to the following:

- · personal and professional integrity;
- ethics and values;
- experience in corporate management, such as serving as an officer or former officer of a publicly held company;
- · experience in the life sciences industry;
- experience as a board member or executive officer of another publicly held company;
- diversity of expertise and experience in substantive matters pertaining to our business relative to other board members;
- · conflicts of interest; and
- · business judgment.

Currently, our board of directors evaluates, and following the consummation of this offering will evaluate, each individual in the context of the board of directors as a whole, with the objective of assembling a group that can best exercise oversight of management and the business and effectively represent stockholder interests through the exercise of sound business judgment using its diversity and depth of experience in these various areas.

### Code of business conduct and ethics

Prior to the consummation of this offering, our board of directors will adopt a code of business conduct and ethics that will apply to all of our employees, officers and directors, including those officers responsible for

financial reporting. Following the consummation of this offering, the code of business conduct and ethics will be available on our website. We expect that any amendments to the code, or any waivers of its requirements, will be disclosed on our website or in public filings.

# Limitation of liability and indemnification matters

Our amended and restated certificate of incorporation, which will become effective immediately prior to the consummation of this offering, will contain provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- · any breach of the director's duty of loyalty to us or our stockholders;
- · any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- · any transaction from which the director derived an improper personal benefit.

Each of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to the consummation of this offering, will provide that we are required to indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. Our amended and restated bylaws will also obligate us to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. With specified exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions that will be included in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and our stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage.

# **Executive and director compensation**

This section discusses the material components of the executive compensation program for our executive officers who are named in the "2019 summary compensation table" below. In 2019, our "named executive officers" and their positions were as follows:

- Mark A. Goldsmith, M.D., Ph.D., our President and Chief Executive Officer;
- · Steve Kelsey, M.D., our President, Research and Development; and
- Margaret Horn, J.D., our Chief Operating Officer and General Counsel.

This discussion may contain forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. Actual compensation programs that we adopt following the completion of this offering may differ materially from the currently planned programs summarized in this discussion. As an "emerging growth company" as defined in the JOBS Act, we are not required to include a Compensation Discussion and Analysis section and have elected to comply with the scaled disclosure requirements applicable to emerging growth companies.

# 2019 summary compensation table

The following table sets forth all of the compensation awarded to or earned by or paid to our named executive officers during 2018 and 2019.

				Option	Non-equity incentive plan	All other	
Name and principal position	Year	Salary	Bonus	awards(1)	compensation(2)	compensation(3)	Total
Mark A. Goldsmith, M.D., Ph.D.  President and Chief Executive Officer	2019 2018	\$504,300 489,567	_	\$3,808,974 582,915	<u> </u>	\$ 2,000 —	\$4,315,274 1,304,982
Steve Kelsey, M.D.  President, Research and  Development	2019 2018	424,350 405,000	_ _	1,298,253 81,934	152,150	2,000	1,724,603 639,084
Margaret Horn, J.D.  Chief Operating Officer and General  Counsel	2019 2018	384,375 347,500	=	1,662,587 31,323	140,000	2,000	2,048,962 518,823

<sup>(1)</sup> Amounts reported represent the aggregate grant date fair value of stock options granted to our named executive officers computed in accordance with FASB ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 10 to our consolidated financial statements included in this prospectus. Our named executive officers will only realize compensation to the extent the trading price of our common stock is greater than the exercise price of such stock options.

# Narrative to the summary compensation table

### 2019 salaries

Our named executive officers each receive a base salary to compensate them for services rendered to our company. The base salary payable to each named executive officer is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities.

<sup>(2)</sup> The annual performance-based cash bonus earned by our named executive officers for 2019 performance have not yet been determined. It is anticipated that such bonuses will be determined later in the first quarter of 2020, at which time the Company will disclose the amounts of such bonuses. Please see the description of the annual bonus program under "2019 bonuses" below.

<sup>(3)</sup> Represents Company matching contributions under our 401(k) plan.

For fiscal year 2019, Dr. Goldsmith's annual base salary was \$506,760, Dr. Kelsey's annual base salary was \$426,420, and Ms. Horn's annual base salary was \$386,250. The annual base salaries of our named executive officers were increased 3% from their respective levels in 2018, effective March 1, 2019.

#### 2019 bonuses

We maintain an annual performance-based cash bonus program in which each of our named executive officers participated in 2019. Each named executive officer's target bonus is expressed as a percentage of base salary which can be achieved by meeting corporate goals at target level. The 2019 annual bonuses for Dr. Goldsmith, Dr. Kelsey and Ms. Horn are targeted at 45%, 35% and 35% of their respective base salaries, which levels remain unchanged from 2018.

For 2019, our named executive officers are eligible to earn annual cash bonuses based on the achievement of certain corporate performance objectives approved by the compensation committee and the board of directors as well as individual achievement, with corporate achievement weighted 90% and the individual achievement weighted 10%.

The board of directors has not yet determined the Company's achievement of the applicable performance goals or bonus payments with respect to 2019, but anticipates that such determinations will be made later in the first quarter of 2020.

### Equity compensation

We currently maintain the 2014 Equity Incentive Plan, pursuant to which we may grant equity awards to certain of our service providers. In connection with Ms. Horn's promotion from Executive Vice President and General Counsel to Chief Operating Officer and General Counsel, our board approved, effective March 2019, the grant of an option to purchase 500,000 shares of our common stock, which vests as to 1/48<sup>th</sup> of the shares subject to the option on each monthly anniversary of January 1, 2018, subject to Ms. Horn's continued service on each applicable vesting date. Each option is exercisable immediately, in whole or in part, provided that shares acquired upon exercise of any unvested portion are subject to a right of repurchase by the Company.

In March 2019, we granted to Dr. Goldsmith, Dr. Kelsey and Ms. Horn options to purchase 1,936,538, 600,000 and 600,000 shares of our common stock, respectively, each of which vests with respect to 1/48th of the shares subject to the option on each monthly anniversary of March 13, 2019, subject to the executive's continued service on each applicable vesting date. In addition, in August 2019, we granted to Dr. Goldsmith, Dr. Kelsey and Ms. Horn options to purchase 2,839,200, 1,006,020 and 1,093,900 shares of our common stock, respectively, each of which vests with respect to 1/48th of the shares subject to the option on each monthly anniversary of August 9, 2019, subject to the executive's continued service to the Company on each applicable vesting date.

Each option is exercisable immediately, in whole or in part, provided that shares acquired upon exercise of any unvested portion are subject to a right of repurchase by the Company.

We intend to adopt a 2020 Incentive Award Plan, or the 2020 Plan, in order to facilitate the grant of cash and equity incentives to directors, employees (including our named executive officers) and consultants of our company and certain of its affiliates and to enable us to obtain and retain services of these individuals, which is essential to our long-term success. The 2020 Plan will be effective on the day prior to the date the registration statement relating to this offering becomes effective. For additional information about the 2020 Plan, please see the section titled "Equity compensation plans" below.

# Other elements of compensation

### Retirement plans

We maintain a 401(k) retirement savings plan for our employees, including our named executive officers, who satisfy certain eligibility requirements. Our named executive officers are eligible to participate in the 401(k) plan on the same terms as other full-time employees. We introduced a discretionary company contribution match for 2019 equal to 50% of participant contributions, subject to a maximum company match of \$2,000. We did not match contributions made by participants prior to 2019. We believe that providing a vehicle for tax-deferred retirement savings though our 401(k) plan adds to the overall desirability of our executive compensation package and further incentivizes our employees, including our named executive officers, in accordance with our compensation policies.

### Employee benefits and perquisites

All of our full-time employees, including our named executive officers, are eligible to participate in our health and welfare plans, including medical, dental and vision benefits, a cafeteria plan, short-term and long-term disability insurance, life insurance and pre-tax transit spending accounts. We do not currently provide any perquisites or other personal benefits to our named executive officers.

# Outstanding equity awards as of December 31, 2019

The following table provides information about outstanding equity awards held by each of our named executive officers at December 31, 2019. All awards were granted under our 2014 Equity Incentive Plan.

				Option awa	ards		Stock	awards
Name and principal position	Grant date	Vesting commencement date	Number of securities underlying exercisable options(1)	Number of securities underlying unexercisable options(1)	Option exercise price (\$)	Option expiration date	Number of shares or units of stock that have not vested	Market value of shares or units of stock that have not vested (\$)(2)
Mark A. Goldsmith, M.D., Ph.D President and Chief Executive Officer	3/21/2017 2/12/2018 4/20/2018 3/13/2019 8/9/2019	12/1/2016(3) 3/1/2018(3) 3/29/2018(3) 3/13/2019(3) 8/9/2019(3)	750,000 475,807 328,125 363,100 236,600	250,000 611,753 421,875 1,573,438 2,602,600	0.10 0.11 0.23 0.84 0.97	3/20/2027 2/11/2028 4/19/2028 3/12/2029 8/8/2029	_ _ _ _	=
Steve Kelsey, M.D. President, Research and Development	3/21/2017 2/12/2018 3/13/2019 8/9/2019	3/20/2017(4) 3/1/2018(4) 3/13/2019(3) 8/9/2019(3)	112,500 83,835	487,500 922,185	 0.84 0.97	3/12/2029 8/8/2029	312,500 171,090 —	=
Margaret Horn, J.D. Chief Operating Officer and General Counsel	3/21/2017 6/7/2017 2/12/2018 3/13/2019 3/13/2019 8/9/2019	3/20/2017(4) 6/7/2017(4) 3/1/2018(3) 1/1/2018(3) 3/13/2019(3) 8/9/2019(3)	239,583 112,500 91,158	65,407 260,417 487,500 1,002,742	0.11 0.84 0.84 0.97	2/11/2028 3/12/2029 3/12/2029 8/8/2029	25,000 56,250 — — —	_ _ _

<sup>(1)</sup> Each stock option permits early exercise of the unvested portion of the award in exchange for restricted stock and was, therefore, fully exercisable as of December 31, 2019. The number of shares shown as exercisable and unexercisable reflect the number of shares vested and unexeted, respectively, as of December 31, 2019.

- (2) The market value of our common stock is based upon the assumed initial public offering price of \$ per share, which is the midpoint of the range set forth on the cover of this prospectus.
- (3) 1/48<sup>th</sup> of the shares originally subject to the option vest monthly measured from the vesting commencement date, subject to continued service on the applicable vesting date.
- (4) Represents shares of restricted stock acquired upon exercise of an option prior to vesting. The shares of restricted stock are subject to repurchase by us at the original exercise price upon a termination of service prior to vesting. The unvested shares reported vest in equal monthly installments through the fourth anniversary of the vesting commencement date subject to continued service through each applicable vesting date.

# **Executive compensation arrangements**

Offer letters. We have entered into offer letter agreements with each of our named executive officers in connection with his or her employment with us. These agreements set forth the terms and conditions of employment of each named executive officer, including initial base salary, target bonus opportunity and equity grants and employee benefits eligibility.

Change in control separation benefits plan. In September 2017, our board of directors adopted a Change in Control Separation Benefits Plan that provides severance benefits to employees of the Company, including our named executive officers, in the event of a termination by the Company without "cause" or a resignation for "good reason" (each as defined in the plan), in each case, within the period commencing three months prior to and ending 12 months following a change in control of the Company (such termination, a "qualifying termination"). In the event of a qualifying termination, our named executive officers would be eligible to receive (i) a cash lump sum payment equal to (A) 0.75x (or 1x, in the case of our Chief Executive Officer) his or her annual base salary plus (B) his or her annual target bonus, in each case, at the greater of the rate immediately in effect as of the qualifying termination or the change in control; (ii) payment or reimbursement of continued healthcare premiums pursuant to COBRA for up to the end of the ninth month (or the twelfth month, in the case of our Chief Executive Officer) following termination; and (iii) full accelerated vesting of any equity awards outstanding as of the date of the qualifying termination. All such severance benefits are subject to the participant signing a general release of all claims against the Company and its affiliates that becomes effective and irrevocable within 60 days after the termination of employment in a form reasonably acceptable to the Company.

In December 2019, our board of directors approved the amendment and restatement of the Change in Control Separation Benefits Plan, pursuant to which our named executive officers are no longer eligible to participate in the plan.

New employment agreements. In connection with this offering, we intend to enter into new employment arrangements with our currently employed named executive officers, which will supersede in their entirety their current offer letters and the terms of the Change in Control Separation Benefits Plan.

Pursuant to the terms of the new employment agreements, in the event the named executive officer is terminated without Cause or resigns for Good Reason (each, as defined in the employment agreements), in each case, other than during the period commencing three months prior to and ending 18 months following a change in control, the named executive officer will be eligible to receive: (i) a lump sum cash payment equal to 1x, in the case of our Chief Executive Officer or 0.75x, in the case of our other named executive officers, the sum of the executive's annual base salary and target annual bonus; (ii) payment or reimbursement of COBRA premiums for 12 months, in the case of our Chief Executive Officer or nine months, in the case of our other named executive officers; and (iii) at the discretion of the board of directors or the compensation committee, 12 months' accelerated vesting of equity awards, in the case of our Chief Executive Officer or 9 months' accelerated vesting of equity awards, in the case of our other named executive officers.

In addition, in the event the named executive officer is terminated without Cause or resigns for Good Reason, in each case, during the period commencing three months prior to and ending 18 months following a change in control, the named executive officer will be eligible to receive: (i) a lump sum cash payment equal to 1.5x, in the case of our Chief Executive Officer, or 1x, in the case of our other named executive officers, the sum of the executive's annual base salary and target annual bonus; (ii) payment or reimbursement of COBRA premiums for 18 months, in the case of our Chief Executive Officer, or 12 months, in the case of our other named executive officers; and (iii) full accelerated vesting of all equity awards. All severance payments and benefits under the employment agreements are subject to the executive's execution of a release of claims against us.

# **Equity compensation plans**

The following summarizes the material terms of the 2020 Plan, in which our named executive officers will be eligible to participate following the consummation of this offering, our 2014 Equity Incentive Plan, or the 2014 Plan, under which we have previously made periodic grants of equity and equity-based awards to our named executive officers and other key employees and the employee stock purchase plan that we intend to adopt in connection with the consummation of this offering.

#### 2020 Incentive Award Plan

We intend to adopt the 2020 Plan, which will be effective on the day prior to the date the Company's registration statement relating to this offering becomes effective. The principal purpose of the 2020 Plan is to attract, retain and motivate selected employees, consultants and directors through the granting of stock-based compensation awards and cash-based performance bonus awards. The material terms of the 2020 Plan, as it is currently contemplated, are summarized below.

Share reserve. Under the 2020 Plan, shares of our common stock will be initially reserved for issuance pursuant to a variety of stock-based compensation awards, including stock options, stock appreciation rights, or SARs, restricted stock awards, restricted stock unit awards, performance bonus awards, performance stock unit awards, dividend equivalents, or other stock or cash based awards. The number of shares initially reserved for issuance or transfer pursuant to awards under the 2020 Plan will be increased by (i) the number of shares represented by awards outstanding under our 2014 Plan ("2014 Plan Awards") that become available for issuance under the counting provisions described below following the effective date and (ii) an annual increase on the first day of each fiscal year beginning in 2021 and ending in 2030, equal to the lesser of (A) % of the shares of stock outstanding (on an as converted basis) on the last day of the immediately preceding fiscal year and (B) such smaller number of shares of stock as determined by our board of directors; provided, however, that no more than shares of stock may be issued upon the exercise of incentive stock options.

The following counting provisions will be in effect for the share reserve under the 2020 Plan:

- to the extent that an award (including a 2014 Plan Award) expires, lapses or is terminated, converted into an award in respect of shares of
  another entity in connection with a spin-off or other similar event, exchanged for cash, surrendered, repurchased, canceled, in any case, in
  a manner that results in the Company acquiring the underlying shares at a price not greater than the price paid by the participant or not
  issuing the underlying shares, such unused shares subject to the award at such time will be available for future grants under the 2020 Plan;
- to the extent shares are tendered or withheld to satisfy the grant, exercise price or tax withholding obligation with respect to any award under the 2020 Plan or 2014 Plan Award, such tendered or withheld shares will be available for future grants under the 2020 Plan;

- to the extent shares subject to stock appreciation rights are not issued in connection with the stock settlement of stock appreciation rights on exercise thereof, such shares will be available for future grants under the 2020 Plan;
- the payment of dividend equivalents in cash in conjunction with any outstanding awards or 2014 Plan Awards will not be counted against
  the shares available for issuance under the 2020 Plan; and
- shares issued in assumption of, or in substitution for, any outstanding awards of any entity acquired in any form of combination by us or any of our subsidiaries will not be counted against the shares available for issuance under the 2020 Plan.

Administration. The compensation committee of our board of directors is expected to administer the 2020 Plan unless our board of directors assumes authority for administration. The board of directors may delegate its powers to a committee, which, to the extent required to comply with Rule 16b-3, is intended to comprise "non-employee directors" for purposes of Rule 16b-3 under the Exchange Act. The 2020 Plan provides that the board or compensation committee may delegate its authority to grant awards other than to individuals subject to Section 16 of the Exchange Act or officers or directors to whom authority to grant awards has been delegated.

Subject to the terms and conditions of the 2020 Plan, the administrator has the authority to select the persons to whom awards are to be made, to determine the number of shares to be subject to awards and the terms and conditions of awards, and to make all other determinations and to take all other actions necessary or advisable for the administration of the 2020 Plan. The administrator is also authorized to adopt, amend or rescind rules relating to administration of the 2020 Plan. Our board of directors may at any time remove the compensation committee as the administrator and revest in itself the authority to administer the 2020 Plan. The full board of directors will administer the 2020 Plan with respect to awards to non-employee directors.

*Eligibility.* Awards under the 2020 Plan may be granted to individuals who are then our officers, employees or consultants or are the officers, employees or consultants of certain of our subsidiaries. Such awards also may be granted to our directors. However, only employees of our company or certain of our subsidiaries may be granted incentive stock options, or ISOs.

Awards. The 2020 Plan provides that the administrator may grant or issue stock options, SARs, restricted stock, restricted stock units, performance bonus awards, performance stock units, other stock- or cash-based awards and dividend equivalents, or any combination thereof. Each award will be set forth in a separate agreement with the person receiving the award and will indicate the type, terms and conditions of the award.

- Nonstatutory Stock Options, or NSOs, will provide for the right to purchase shares of our common stock at a specified price which may not
  be less than fair market value on the date of grant, and usually will become exercisable (at the discretion of the administrator) in one or
  more installments after the grant date, subject to the participant's continued employment or service with us and/or subject to the
  satisfaction of corporate performance targets and individual performance targets established by the administrator. NSOs may be granted
  for any term specified by the administrator that does not exceed ten years.
- Incentive Stock Options, or ISOs, will be designed in a manner intended to comply with the provisions of Section 422 of the Code and will be subject to specified restrictions contained in the Code. Among such restrictions, ISOs must have an exercise price of not less than the fair market value of a share of common stock on the date of grant, may only be granted to employees, and must not be exercisable after a period of ten years measured from the date of grant. In the case of an ISO granted to an individual who owns (or is deemed to own) at least 10% of the total combined voting power of all classes of our capital stock, the 2020 Plan provides that the exercise price must be at least 110% of the fair market value of a share of common

stock on the date of grant and the ISO must not be exercisable after a period of five years measured from the date of grant.

- Restricted Stock may be granted to any eligible individual and made subject to such restrictions as may be determined by the
  administrator. Restricted stock, typically, may be forfeited for no consideration or repurchased by us at the original purchase price if the
  conditions or restrictions on vesting are not met. In general, restricted stock may not be sold or otherwise transferred until restrictions are
  removed or expire. Purchasers of restricted stock, unlike recipients of options, will have voting rights and will have the right to receive
  dividends, if any, prior to the time when the restrictions lapse, however, extraordinary dividends will generally be placed in escrow, and will
  not be released until restrictions are removed or expire.
- Restricted Stock Units may be awarded to any eligible individual, typically without payment of consideration, but subject to vesting
  conditions based on continued employment or service or on performance criteria established by the administrator. Like restricted stock,
  restricted stock units may not be sold, or otherwise transferred or hypothecated, until vesting conditions are removed or expire. Unlike
  restricted stock, stock underlying restricted stock units will not be issued until the restricted stock units have vested, and recipients of
  restricted stock units generally will have no voting or dividend rights prior to the time when vesting conditions are satisfied.
- Stock Appreciation Rights, or SARs, may be granted in connection with stock options or other awards, or separately. SARs granted in
  connection with stock options or other awards typically will provide for payments to the holder based upon increases in the price of our
  common stock over a set exercise price. The exercise price of any SAR granted under the 2020 Plan must be at least 100% of the fair
  market value of a share of our common stock on the date of grant. SARs under the 2020 Plan will be settled in cash or shares of our
  common stock, or in a combination of both, at the election of the administrator.
- Performance Bonus Awards and Performance Stock Units are denominated in cash or shares/unit equivalents, respectively, and may be linked to one or more performance or other criteria as determined by the administrator.
- Other Stock or Cash Based Awards are awards of cash, fully vested shares of our common stock and other awards valued wholly or
  partially by referring to, or otherwise based on, shares of our common stock. Other stock or cash based awards may be granted to
  participants and may also be available as a payment form in the settlement of other awards, as standalone payments and as payment in
  lieu of base salary, bonus, fees or other cash compensation otherwise payable to any individual who is eligible to receive awards. The
  administrator will determine the terms and conditions of other stock or cash based awards, which may include vesting conditions based on
  continued service, performance and/or other conditions.
- Dividend Equivalents represent the right to receive the equivalent value of dividends paid on shares of our common stock and may be granted alone or in tandem with awards other than stock options or SARs. Dividend equivalents are converted to cash or shares by such formula and such time as determined by the administrator. In addition, dividend equivalents with respect to an awards subject to vesting will either (i) to the extent permitted by applicable law, not be paid or credited or (ii) be accumulated and subject to vesting to the same extent as the related award.

Any award may be granted as a performance award, meaning that the award will be subject to vesting and/or payment based on the attainment of specified performance goals.

Change in control. In the event of a change in control, unless the administrator elects to terminate an award in exchange for cash, rights or other property, or cause an award to accelerate in full prior to the change in control, such award will continue in effect or be assumed or substituted by the acquirer, provided that any

performance-based portion of the award will be subject to the terms and conditions of the applicable award agreement. In the event the acquirer refuses to assume or replace awards granted, prior to the consummation of such transaction, awards issued under the 2020 Plan (other than any portion subject to performance-based vesting) will be subject to accelerated vesting such that 100% of such awards will become vested and exercisable or payable, as applicable. The administrator may also make appropriate adjustments to awards under the 2020 Plan and is authorized to provide for the acceleration, cash-out, termination, assumption, substitution or conversion of such awards in the event of a change in control or certain other unusual or nonrecurring events or transactions.

Adjustments of awards. The administrator has broad discretion to take action under the 2020 Plan, as well as make adjustments to the terms and conditions of existing and future awards, to prevent the dilution or enlargement of intended benefits and facilitate necessary or desirable changes in the event of certain transactions and events affecting our common stock, such as stock dividends, stock splits, mergers, acquisitions, consolidations and other corporate transactions. In addition, in the event of certain non-reciprocal transactions with our stockholders known as "equity restructurings," the administrator will make equitable adjustments to the 2020 Plan and outstanding awards.

Amendment and termination. The administrator may terminate, amend or modify the 2020 Plan at any time and from time to time. However, we must generally obtain stockholder approval to the extent required by applicable law, rule or regulation (including any applicable stock exchange rule), and generally no amendment may materially and adversely affect any outstanding award without the affected participant's consent.

Notwithstanding the foregoing, an option may be amended to reduce the per share exercise price below the per share exercise price of such option on the grant date and options may be granted in exchange for, or in connection with, the cancellation or surrender of options having a higher per share exercise price without receiving additional stockholder approval.

No incentive stock options may be granted pursuant to the 2020 Plan after the tenth anniversary of the effective date of the 2020 Plan, and no additional annual share increases to the 2020 Plan's aggregate share limit will occur from and after such anniversary. Any award that is outstanding on the termination date of the 2020 Plan will remain in force according to the terms of the 2020 Plan and the applicable award agreement.

### 2014 Equity Incentive Plan

Our board of directors adopted, and our stockholders approved, the 2014 Plan effective as of December 4, 2014. The 2014 Plan has subsequently been amended on multiple occasions to increase the number of shares issuable thereunder. The 2014 Plan provides for the grant of ISOs, NSOs, SARs, restricted stock, and restricted stock units. As of September 30, 2019, options to purchase 22,728,675 shares of our common stock at a weighted-average exercise price per share of \$0.69 remained outstanding under the 2014 Plan. Following this offering and in connection with the effectiveness of our 2020 Plan, the 2014 Plan will terminate and no further awards will be granted under the 2014 Plan. However, all outstanding awards will continue to be governed by their existing terms.

Administration. Our board of directors or a committee thereof appointed by our board of directors, has the authority to administer the 2014 Plan and the awards granted under it. The administrator's authority includes the authority to select the service providers to whom awards will be granted under the 2014 Plan, the number of shares to be subject to those awards under the 2014 Plan, and the terms and conditions of the awards granted. In addition, the administrator has the authority to construe and interpret the 2014 Plan and to adopt rules for the administration, interpretation and application of the 2014 Plan that are consistent with the terms of the 2014 Plan.

Awards. The 2014 Plan provides that the administrator may, subject to certain conditions, grant or issue options, including ISOs and NSOs, SARs, restricted stock and restricted stock units to employees, consultants and directors; provided that only employees may be granted ISOs.

- Stock options. The 2014 Plan provides for the grant of ISOs or NSOs. ISOs may be granted only to employees. NSOs may be granted to employees, directors or consultants. The exercise price of ISOs granted to employees who at the time of grant own stock representing more than 10% of the voting power of all classes of our common stock may not be less than 110% of the fair market value per share of our common stock on the date of grant, and the exercise price of ISOs granted to any other employees may not be less than 100% of the fair market value per share of our common stock on the date of grant. The exercise price of NSOs to employees, directors or consultants may not be less than 100% of the fair market value per share of our common stock on the date of grant.
- Stock appreciation rights. The 2014 Plan provides for the grant of SARs. Each SAR will be governed by a stock appreciation right agreement. The exercise price of SARs may not be less than 100% of the fair market value per share of our common stock on the date of grant.
- Restricted stock awards. The 2014 Plan provides for the grant of restricted stock awards. Each restricted stock award will be governed by
  a restricted stock award agreement, which will detail the restrictions on transferability, risk of forfeiture and other restrictions the
  administrator approves. In general, restricted stock may not be sold, transferred, pledged, hypothecated, margined or otherwise
  encumbered, whether voluntarily or by operation of law, until restrictions are removed or expire. Holders of restricted stock, unlike
  recipients of other equity awards, will have voting rights and will have the right to receive dividends, if any, prior to the time when the
  restrictions lapse.
- Restricted stock units. The 2014 Plan provides that we may issue restricted stock unit awards which may be settled in either cash, common stock or a combination of both. Each restricted stock unit award will be governed by a restricted stock unit award agreement that will set forth any vesting conditions based on continued employment or service or on performance criteria established by the administrator. Unlike restricted stock, stock underlying restricted stock units will not be issued until the restricted stock units have vested, and recipients of restricted stock units generally will have no rights as a stockholder prior to the time when vesting conditions are satisfied.

Adjustments of awards. In the event of any change in or other event that occurs with respect to the common stock without receipt of consideration by the Company (through merger, consolidation, reorganization, recapitalization, stock dividends, stock splits or other similar transactions), the administrator will make adjustments to the number and class of shares available for issuance under the 2014 Plan, the number and class of shares issuable pursuant to ISOs, and the number, class and price per share of outstanding awards.

Change in control. In the event of certain corporate transactions, including the sale of substantially all of the Company's assets, a sale or disposition of 90% of the outstanding securities of the Company, and certain mergers, consolidations and similar transactions, unless otherwise stated in an award agreement, the administrator will provide for one or more of the following actions: assumption or substitution of outstanding awards; assignment of reacquisition or repurchase rights held by the Company; or acceleration, cancellation or cash-out of outstanding awards. Awards may also be subject to additional acceleration in connection with a change in control pursuant to an award agreement or other written agreement with the Company.

Amendment and termination. Our board of directors may amend, suspend or terminate the 2014 Plan at any time, but no amendment will impair the rights of a holder of an outstanding award without the holder's consent. Except with respect to certain capitalization adjustments, an amendment of the 2014 Plan shall be

subject to the approval of our stockholders to the extent required by applicable law. Following this offering and in connection with the effectiveness of our 2020 Plan, the 2014 Plan will terminate and no further awards will be granted under the 2014 Plan.

### 2020 Employee Stock Purchase Plan

We intend to adopt the 2020 Employee Stock Purchase Plan, which we refer to as our ESPP, which will be effective on the day prior to the date the registration statement relating to this offering becomes effective. The ESPP is designed to allow our eligible employees to purchase shares of our common stock, at periodic intervals, with their accumulated payroll deductions. The ESPP is intended to qualify under Section 423 of the Code. The material terms of the ESPP, as it is currently contemplated, are summarized below.

Administration. Subject to the terms and conditions of the ESPP, our compensation committee will administer the ESPP. Our compensation committee can delegate administrative tasks under the ESPP to the services of an agent and/or employees to assist in the administration of the ESPP. The administrator will have the discretionary authority to administer and interpret the ESPP. Interpretations and constructions of the administrator of any provision of the ESPP or of any rights thereunder will be conclusive and binding on all persons. We will bear all expenses and liabilities incurred by the ESPP administrator.

Share reserve. The maximum number of our shares of our common stock which will be authorized for sale under the ESPP is equal to the sum of (a) shares of common stock and (b) an annual increase on the first day of each year beginning in 2021 and ending in 2030, equal to the lesser of (i) % of the shares of common stock outstanding (on an as converted basis) on the last day of the immediately preceding fiscal year and (ii) such number of shares of common stock as determined by our board of directors; provided, however, no more than shares of our common stock may be issued under the ESPP. The shares reserved for issuance under the ESPP may be authorized but unissued shares or reacquired shares.

Eligibility. Employees eligible to participate in the ESPP for a given offering period generally include employees who are employed by us or one of our subsidiaries on the first day of the offering period, or the enrollment date. Our employees (and, if applicable, any employees of our subsidiaries) who customarily work less than five months in a calendar year or are customarily scheduled to work less than 20 hours per week will not be eligible to participate in the ESPP. Finally, an employee who owns (or is deemed to own through attribution) 5% or more of the combined voting power or value of all our classes of stock or of one of our subsidiaries will not be allowed to participate in the ESPP.

Participation. Employees will enroll under the ESPP by completing a payroll deduction form permitting the deduction from their compensation of at least 1% of their compensation but not more than % of their compensation. Such payroll deductions may be expressed as either a whole number percentage or a fixed dollar amount, and the accumulated deductions will be applied to the purchase of shares on each purchase date. However, a participant may not purchase more than shares in each offering period and may not accrue the right to purchase shares of common stock at a rate that exceeds \$25,000 in fair market value of shares of our common stock (determined at the time the option is granted) for each calendar year the option is outstanding (as determined in accordance with Section 423 of the Code). The ESPP administrator has the authority to change these limitations for any subsequent offering period.

Offering. Under the ESPP, participants are offered the option to purchase shares of our common stock at a discount during a series of successive offering periods, the duration and timing of which will be determined by the ESPP administrator. However, in no event may an offering period be longer than 27 months in length.

The option purchase price will be the lower of 85% of the closing trading price per share of our common stock on the first trading date of an offering period in which a participant is enrolled or 85% of the closing trading price per share on the purchase date, which will occur on the last trading day of each offering period.

Unless a participant has previously canceled his or her participation in the ESPP before the purchase date, the participant will be deemed to have exercised his or her option in full as of each purchase date. Upon exercise, the participant will purchase the number of whole shares that his or her accumulated payroll deductions will buy at the option purchase price, subject to the participation limitations listed above.

A participant may cancel his or her payroll deduction authorization at any time prior to the end of the offering period. Upon cancellation, the participant will have the option to either (i) receive a refund of the participant's account balance in cash without interest or (ii) exercise the participant's option for the current offering period for the maximum number of shares of common stock on the applicable purchase date, with the remaining account balance refunded in cash without interest. Following at least one payroll deduction, a participant may also decrease (but not increase) his or her payroll deduction authorization once during any offering period. If a participant wants to increase or decrease the rate of payroll withholding, he or she may do so effective for the next offering period by submitting a new form before the offering period for which such change is to be effective.

A participant may not assign, transfer, pledge or otherwise dispose of (other than by will or the laws of descent and distribution) payroll deductions credited to a participant's account or any rights to exercise an option or to receive shares of our common stock under the ESPP, and during a participant's lifetime, options in the ESPP shall be exercisable only by such participant. Any such attempt at assignment, transfer, pledge or other disposition will not be given effect.

Adjustments upon changes in recapitalization, dissolution, liquidation, merger or asset sale. In the event of any increase or decrease in the number of issued shares of our common stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the common stock, or any other increase or decrease in the number of shares of common stock effected without receipt of consideration by us, we will proportionately adjust the aggregate number of shares of our common stock offered under the ESPP, the number and price of shares which any participant has elected to purchase under the ESPP and the maximum number of shares which a participant may elect to purchase in any single offering period. If there is a proposal to dissolve or liquidate us, then the ESPP will terminate immediately prior to the consummation of such proposed dissolution or liquidation, and any offering period then in progress will be shortened by setting a new purchase date to take place before the date of our dissolution or liquidation. We will notify each participant of such change in writing at least 10 business days prior to the new exercise date. If we undergo a merger with or into another corporation or sell all or substantially all of our assets, each outstanding option will be assumed or an equivalent option substituted by the successor corporation or the parent or subsidiary of the successor corporation. If the successor corporation refuses to assume the outstanding options or substitute equivalent options, then any offering period then in progress will be shortened by setting a new purchase date to take place before the date of our proposed sale or merger. We will notify each participant of such change in writing at least 10 business days prior to the new exercise date.

Amendment and termination. Our board of directors may amend, suspend or terminate the ESPP at any time. However, the board of directors may not amend the ESPP without obtaining stockholder approval within 12 months before or after such amendment to the extent required by applicable laws.

# **Director compensation**

We have entered into board member letters with each of Ms. Anderson, Dr. Miller and Dr. Weber, who were during 2019 non-employee directors not affiliated of one of our principal investors, whom we refer to as our

non-employee, non-investor directors. Pursuant to these letters, each of Ms. Anderson, Dr. Miller and Dr. Weber were eligible to receive:

- · an annual board retainer of \$30,000;
- in connection with his or her initial appointment to our board of directors, an option to purchase 150,000 shares of our common stock, which vests as to 25% of the shares subject to the option on the first anniversary of the grant date and as to 6.25% of the shares subject to the option on each quarterly anniversary thereafter, subject to continued service; and
- following the second anniversary of service, in the discretion of the board of directors, additional annual grants of an option to purchase 30,000 shares of our common stock, which vests as to 1/12<sup>th</sup> of the shares on each monthly anniversary of the grant date, subject to continued service.

Mr. Borisy also became a non-employee, non-investor director in July 2019. Our directors who are either our employees, including Dr. Goldsmith, or are affiliated with one of our principal investors do not currently receive any compensation for their service as directors. However, we reimburse our non-employee directors for reasonable out of pocket travel or other expenses for Company business as approved by the Company. Dr. Goldsmith's compensation as our President and Chief Executive Officer is set forth in the summary compensation table above

In March 2019, our board granted to Ms. Anderson an option to purchase 30,000 shares, which vests as to 1/12th of the shares subject to the option on each monthly anniversary thereafter, subject to continued service to the Company.

In June 2019, following a market assessment of the compensation paid to our non-employee, non-investor directors, our board approved increasing the initial option grant to 266,000 shares and the annual option grant to 70,000 shares, with the initial option grant vesting as to 25% of the shares subject to the option on the first anniversary of the grant date and as to 1/48th of the shares subject to the option on each monthly anniversary thereafter, subject to continued service to the Company, and the annual option grant continuing to vest as to 1/12th of the shares on each monthly anniversary of the grant date, subject to continued service to the Company.

In July 2019, in connection with his change in status to a non-employee, non-investor director, our board granted to Mr. Borisy an initial option grant to purchase 266,000 shares and an annual option grant to purchase 70,000 shares, which vest as described above.

In August 2019, our board granted additional options to each of our non-employee, non-investor directors. Drs. Miller and Weber each received an option to purchase 70,000 shares of common stock, which vest as to 1/12th of the shares on each monthly anniversary of September 27, 2019 and April 12, 2020, respectively, subject to continued service to the Company. In addition, Ms. Anderson was granted an option to purchase 91,240 shares of our common stock, Mr. Borisy was granted an option to purchase 18,900 shares of our common stock, and each of Drs. Miller and Weber were granted an additional option to purchase 87,580 shares of common stock, each of which were intended to position the director's compensation closer to market. Ms. Anderson's option vests as to 1/12th of the shares subject to the option on each monthly anniversary of the grant date, Mr. Borisy's option vests as to 1/48th of the shares subject to the option on each monthly anniversary of the grant date,

Dr. Miller's option for 87,580 shares vests as to 1/24th of the shares on each monthly anniversary of the grant date, and Dr. Weber's option for 87,580 shares vests as to 1/30th of the shares on each monthly anniversary of the grant date, in each case, subject to continued service.

Each of the options we have granted to our non-employee, non-investor directors are exercisable immediately, in whole or in part, provided that shares acquired upon exercise of any unvested portion are subject to a right of repurchase by the Company.

### 2019 director compensation table

The following table sets forth all of the compensation awarded to or earned by or paid to non-employee directors during 2019.

	es earned	• 41	
Name	or paid n cash	Option awards(1)	Total
Elizabeth McKee Anderson	\$ 30,000	\$ 101,869	\$131,869
Alexis Borisy	15,000	328,396	343,396
Neil Exter	_	_	_
Laurence Lasky, Ph.D.	_	_	_
Vincent Miller, M.D.	30,000	142,514	172,514
Thilo Schroeder, Ph.D.	_	_	_
Barbara Weber, M.D.	30,000	144,706	174,706

<sup>(1)</sup> Amounts reported represent the aggregate grant date fair value of stock options granted to our non-employee directors during 2019 under our 2014 Equity Incentive Plan, computed in accordance with ASC Topic 718. Assumptions used in the calculation of these amounts are included in Note 10 to our consolidated financial statements included in this prospectus. As of December 31, 2019, our non-employee directors held the following outstanding options and stock awards:

Name	Options Outstanding at Fiscal Year End	Unvested Restricted Shares Outstanding at Fiscal Year End
Elizabeth McKee Anderson	151,240	<u>—</u>
Alexis Borisy	354,900	<u>—</u>
Neil Exter	<del>-</del>	<del>-</del>
Laurence Lasky, Ph.D.	<del>-</del>	<u>—</u>
Vincent Miller, M.D.	157,580	65,625
Thilo Schroeder, Ph.D.	<del>-</del>	<u>—</u>
Barbara Weber, M.D.	307,580	_

We intend to approve and implement a compensation program for our non-employee directors, or the Director Compensation Program, to be effective in connection with the consummation of this offering, which will supersede the current arrangements with our non-employee, non-investor directors and apply broadly to all of our non-employee directors. Pursuant to the Director Compensation Program, our non-employee directors will receive cash compensation as follows:

- Each non-employee director will receive an annual cash retainer in the amount of \$ per year.
- The chairperson will receive an additional annual cash retainer in the amount of \$ per year.
- The chairperson of the audit committee will receive additional annual cash compensation in the amount of \$ per year for such chairperson's service on the audit committee. Each non-chairperson member of the audit committee will receive additional annual cash compensation in the amount of \$ per year for such member's service on the audit committee.

- The chairperson of the compensation committee will receive additional annual cash compensation in the amount of \$ per year for such chairperson's service on the compensation committee. Each non-chairperson member of the compensation committee will receive additional annual cash compensation in the amount of \$ per year for such member's service on the compensation committee.
- The chairperson of the nominating and corporate governance committee will receive additional annual cash compensation in the amount of \$ per year for such chairperson's service on the nominating and corporate governance committee. Each non-chairperson member of the nominating and corporate governance committee will receive additional annual cash compensation in the amount of \$ per year for such member's service on the nominating and corporate governance committee.

Under the Director Compensation Program, each non-employee director will automatically be granted an option to purchase shares of our common stock upon the director's initial appointment or election to our board of directors, referred to as the Initial Grant, and an option to purchase shares of our common stock automatically on the date of each annual stockholder's meeting thereafter, referred to as the Annual Grant. The Initial Grant will vest in substantially equal monthly installments for three years from the date of grant, subject to continued service through each applicable vesting date. The Annual Grant will vest on the earlier of the first anniversary of the date of grant or the date of the next annual stockholder's meeting to the extent unvested as of such date, subject to continued service through each applicable vesting date.

# Certain relationships and related party transactions

In addition to the compensation arrangements, including employment, termination of employment and change in control arrangements, with our directors and executive officers, including those discussed in the sections titled "Management" and "Executive and director compensation," the following is a description of each transaction since January 1, 2016 in which:

- · we have been or are to be a participant;
- · the amounts involved exceeded or will exceed \$120,000; and
- any of our directors, executive officers or holders of more than 5% of our capital stock, or an affiliate or immediate family member thereof, had or will have a direct or indirect material interest.

# Sales and purchases of securities

### Series A preferred stock financing extension

In February, July, October and December 2016 and April and May 2017, we issued an aggregate of 50,194,267 shares of our Series A Preferred Stock at a price per share of \$1.00 for aggregate proceeds to us of \$50,194,267.00. The table below sets forth the number of shares of Series A Preferred Stock sold in 2016 and 2017 to our directors, executive officers or beneficial owners of more than 5% of a class of our capital stock, or an affiliate or immediate family member thereof:

Name	Number of shares of Series A preferred stock	Pu	rchase price (\$)
Entities Affiliated with Third Rock Ventures(1)(2)(3)	25,000,000	\$	25,000,000.00
Entities Affiliated with The Column Group(4)(5)	25,000,000	\$	25,000,000.00

- (1) (i) Third Rock Ventures III, L.P. purchased 20,000,000 shares of Series A Preferred Stock for a total purchase price of \$20,000,000.00 and (ii) Third Rock Ventures IV, L.P. purchased 5,000,000 shares of Series A Preferred Stock for a total purchase price of \$5,000,000.00. Entities affiliated with Third Rock Ventures became beneficial owners of (in the aggregate) more than 5% of our capital stock upon the initial closing of the Series A Preferred Stock financing.
- (2) Alexis Borisy, who is currently a member of our board of directors and was a member of our board of directors at the time of the Series A Preferred Stock financing, was then an affiliate of Third Rock Ventures.
- (3) Michael Bonney, who was a member of our board of directors at the time of the Series A Preferred Stock financing, was then a partner of Third Rock Ventures
- (4) (i) The Column Group III, LP purchased 11,740,876 shares of Series A Preferred Stock for a total purchase price of \$11,740,876.00 and (ii) The Column Group III-A, LP purchased 13,259,124 shares of Series A Preferred Stock for a total purchase price of \$13,259,124.00. Entities affiliated with The Column Group became beneficial owners of (in the aggregate) more than 5% of our capital stock during the course of the Series A Preferred Stock financing.
- (5) Laurence Lasky, Ph.D., who is currently a member of our board of directors and was a member of our board of directors at the time of the Series A Preferred Stock financing, is and was then an affiliate of The Column Group.

### Series B preferred stock financing

In March, June and November 2018, we issued an aggregate of 39,740,031 shares of our Series B Preferred Stock at a price per share of \$1.50 for those shares issued in March and June 2018 and \$2.06 for those shares issued in November 2018, for aggregate proceeds to us of \$60,796,920.58. The table below sets forth the number of shares of Series B Preferred Stock sold to our directors, executive officers or beneficial owners of more than 5% of a class of our capital stock, or an affiliate or immediate family member thereof:

	Number of shares of		
Name	Series B preferred stock	Pu	rchase price (\$)
Entities Affiliated with Third Rock Ventures(1)(2)	3,333,333	\$	4,999,999.50
Entities Affiliated with The Column Group(3)(4)	13,333,332	\$	19,999,998.00
Nextech V Oncology S.C.S., SICAV-SIF(5)(6)	7,637,540	\$	11,999,999.44

- (1) (i) Third Rock Ventures III, L.P. purchased 1,666,666 shares of Series B Preferred Stock for a total purchase price of \$2,499,999.00 and (ii) Third Rock Ventures IV, L.P. purchased 1,666,667 shares of Series B Preferred Stock for a total purchase price of \$2,500,000.50. Entities affiliated with Third Rock Ventures were beneficial owners of (in the aggregate) more than 5% of our capital stock at the time of the Series B Preferred Stock financing.
- (2) Alexis Borisy, who is currently a member of our board of directors and was a member of our board of directors at the time of the Series B Preferred Stock financing, was then an affiliate of Third Rock Ventures.
- (3) (i) The Column Group III, LP purchased 3,130,900 shares of Series B Preferred Stock for a total purchase price of \$4,696,350.00, (ii) The Column Group III-A, LP purchased 3,535,766 shares of Series B Preferred Stock for a total purchase price of \$5,303,649.00, (iii) Ponoi Capital, LP purchased 3,333,333 shares of Series B Preferred Stock for a total purchase price of \$4,999,999.50 and (iv) Ponoi Capital II, LP purchased 3,333,333 shares of Series B Preferred Stock for a total purchase price of \$4,999,999.50. Entities affiliated with The Column Group were beneficial owners of (in the aggregate) more than 5% of our capital stock at the time of the Series B Preferred Stock financing.
- (4) Laurence Lasky, Ph.D., who is currently a member of our board of directors and was a member of our board of directors at the time of the Series B Preferred Stock financing, is, and was then, an affiliate of The Column Group.
- (5) Thilo Schroeder, Ph.D., who is currently a member of our board of directors and was a member of our board of directors at the time of the Series B Preferred Stock financing, is, and was then, an affiliate of Nextech V Oncology S.C.S., SICAV-SIF.
- (6) Nextech V Oncology S.C.S., SICAV-SIF became a beneficial owner of (in the aggregate) more than 5% of our capital stock during the course of the Series B Preferred Stock financing.

### Series C preferred stock financing

In June and July 2019, we issued an aggregate of 48,683,038 shares of our Series C Preferred Stock at a price per share of \$2.06 for aggregate proceeds of \$100,287,058.28. The table below sets forth the number of shares of Series C Preferred Stock sold to our directors, executive officers or beneficial owners of more than 5% of a class of our capital stock, or an affiliate or immediate family member thereof:

	Number of shares of		
Name	Series C preferred stock	Pur	chase price (\$)
Entities Affiliated with Third Rock Ventures(1)(2)	485,437	\$	1,000,000.22
Entities Affiliated with The Column Group(3)(4)	485,437	\$	1,000,000.22
Nextech V Oncology S.C.S., SICAV-SIF(5)(6)	2,669,903	\$	5,500,000.18

- (1) (i) Third Rock Ventures III, L.P. purchased 242,719 shares of Series C Preferred Stock for a total purchase price of \$500,001.14 and (ii) Third Rock Ventures IV, L.P. purchased 242,718 shares of Series C Preferred Stock for a total purchase price of \$499,999.08. Entities affiliated with Third Rock Ventures were beneficial owners of (in the aggregate) more than 5% of our capital stock at the time of the Series C Preferred Stock financing.
- (2) Alexis Borisy, who is currently a member of our board of directors and was a member of our board of directors at the time of the Series C Preferred Stock financing, was then an affiliate of Third Rock Ventures.
- (3) (i) The Column Group III, LP purchased 227,978 shares of Series C Preferred Stock for a total purchase price of \$469,634.68 and (ii) The Column Group III-A, LP purchased 257,459 shares of Series C Preferred Stock for a total purchase price of \$530,365.54. Entities affiliated with The Column Group were beneficial owners of (in the aggregate) more than 5% of our capital stock at the time of the Series C Preferred Stock financing.
- (4) Laurence Lasky, Ph.D., who is currently a member of our board of directors and was a member of our board of directors at the time of the Series C Preferred Stock financing, is, and was then, an affiliate of The Column Group.

- (5) Thilo Schroeder, Ph.D., who is currently a member of our board of directors and was a member of our board of directors at the time of the Series C Preferred Stock financing, is, and was then, an affiliate of Nextech V Oncology S.C.S., SICAV-SIF.
- (6) Prior to the Series C Preferred Stock financing, Nextech V Oncology S.C.S., SICAV-SIF was a beneficial owner of more than 5% of our capital stock.

# Director and executive officer compensation

Please see "Executive and director compensation" for information regarding the compensation of our directors and executive officers.

# **Employment agreements**

We have entered into employment agreements with our executive officers. For more information regarding these agreements, see "Executive and director compensation—Narrative to the summary compensation table" and "Executive and director compensation—Outstanding equity awards as of December 31, 2018."

### Indemnification agreements and directors' and officers' liability insurance

We have entered into or intend to enter into indemnification agreements with each of our directors and executive officers. These agreements will require us to, among other things, indemnify each director and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, penalties, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person's services as a director or executive officer. We have obtained an insurance policy that insures our directors and officers against certain liabilities, including liabilities arising under applicable securities laws. For additional information see "Management—Limitation of liability and indemnification matters."

# Investors' rights agreement

We entered into an amended and restated investors' rights agreement with the purchasers of our outstanding preferred stock, including entities with which certain of our directors are affiliated. Following the consummation of this offering, the holders of approximately 193 million shares of our common stock, including the shares of common stock issuable upon the conversion of our preferred stock, will be entitled to rights with respect to the registration of their shares under the Securities Act. For a more detailed description of these registration rights, see "Description of capital stock—Registration rights." The amended and restated investors' rights agreement also provides for a right of first refusal in favor of certain holders of preferred stock with regard to certain issuances of our capital stock. The rights of first refusal will not apply to, and will terminate upon the consummation of, this offering.

# **Voting agreement**

We entered into an amended and restated voting agreement with certain holders of our common stock and preferred stock. Upon the consummation of this offering, the amended and restated voting agreement will terminate. For a description of the amended and restated voting agreement, see "Management—Board composition—Voting arrangements."

# Right of first refusal and co-sale agreement

We entered into an amended and restated right of first refusal and co-sale agreement with certain holders of our common stock and preferred stock. This agreement provides for rights of first refusal and co-sale relating to the shares of our common stock held by the parties to the agreement. Upon the consummation of this offering, the amended and restated right of first refusal and co-sale agreement will terminate.

# **Acquisition of Warp Drive**

In October 2018, we acquired all outstanding shares of Warp Drive. In connection with the acquisition, we issued 33,079,554 shares of our Series B preferred stock (the "Acquisition Shares") and paid \$0.9 million in other consideration, for total consideration valued at \$69.0 million. Of the Acquisition Shares, 8,315,308 shares of Series B Preferred Stock were issued to entities affiliated with Third Rock Ventures, which beneficially owned more than 5% of our capital stock immediately prior to and following the acquisition. In addition, Alexis Borisy, who is currently a member of our board of directors and was a member of our board of directors at the time of the acquisition of Warp Drive, was then an affiliate of Third Rock Ventures. Of the Acquisition Shares, 16,364,939 shares of Series B Preferred Stock were issued to Sanofi Research Invest, LLC, which became a beneficial owner of more than 5% of our capital stock following the acquisition.

In connection with our acquisition of Warp Drive, we assumed a convertible promissory note, or the "Convertible Note" issued by Warp Drive to an entity affiliated with Third Rock Ventures, dated October 8, 2018. The Convertible Note was issued in a principal amount of \$2,000,000, with simple interest at an annual rate of 8% computed on the basis of a 360-day year. On October 30, 2018, at our election, we converted the Convertible Note into 975,620 shares of our Series B Preferred Stock which were issued to an entity affiliated with Third Rock Ventures pursuant to the terms of the Convertible Note. At the time of such conversion of the Convertible Note, entities affiliated with Third Rock Ventures were beneficial owners of (in the aggregate) more than 5% of our capital stock. Alexis Borisy, who is currently a member of our board of directors and was a member of our board of directors at the time of the conversion of the Convertible Note, was then an affiliate of Third Rock Ventures.

# Casma sublease and sublease guarantee

Following our acquisition of Warp Drive, in February 2019, we entered into a sublease agreement with Casma Therapeutics, Inc., or Casma, for Casma to sublease from us approximately 22,000 square feet of office and laboratory space in Cambridge, Massachusetts. The term of this sublease expires in February 2023. The sublease provides for initial annual base rent for the complete subleased premises of approximately \$1.7 million, with annual increases of approximately 3.0% in annual base rent. Third Rock Ventures, LLC is affiliated with Third Rock Ventures and provided a Guarantee of Sublease to guarantee to us the payment of the sublease obligations under the sublease. At the time such Guarantee of Sublease was provided and at the time we entered into the sublease agreement, entities affiliated with Third Rock Ventures were beneficial owners of (in the aggregate) more than 5% of our capital stock and were major stockholders of Casma. Alexis Borisy, who is currently a member of our board of directors and was a member of our board of directors at the time such Guarantee of Sublease was provided, was then an affiliate of Third Rock Ventures.

### Pliant sublease

In July 2015, we entered into a sublease with Pliant Therapeutics, Inc., or Pliant, for Pliant to sublease from us approximately 10,200 square feet of office and laboratory space in Redwood City, California. The sublease provided for a base rent of \$30,606 per month and a term expiring on December 31, 2016. In March 2016, we amended the sublease to, among other things, extend the term to end on March 31, 2017 and increase the monthly base rent starting in January 2017 to \$31,626. In September 2016, we amended and restated the sublease to, among other things, extend the sublease term to end on March 31, 2018, increase the total sublease premises to approximately 18,000 square feet and increase the monthly base rent to \$45,909 with a further increase to \$80,851 upon the substantial completion of certain improvements to the subleased premises. In addition, Pliant exercised an option to extend the sublease term through June 2018. In connection with the amendment and restatement, we entered into an agreement with Pliant relating to the use of shared

spaces and services. At the time of the sublease agreement with Pliant and each amendment, entities affiliated with Third Rock Ventures were beneficial owners of (in the aggregate) more than 5% of our capital stock and Third Rock Ventures was a major stockholder of Pliant. In addition, Alexis Borisy, who is currently a member of our board of directors and was a member of our board of directors at the time of such sublease agreement and each amendment, was then an affiliate of Third Rock Ventures.

### **Transactions with Sanofi**

In June 2018, we entered into a collaborative research, development and commercialization agreement with Aventis, Inc. (an affiliate of Sanofi), or the Sanofi Agreement, to research and develop SHP2 inhibitors, including RMC-4630, for any indications. The Sanofi Agreement was assigned to Genzyme Corporation, a Sanofi affiliate, in December 2018. For information regarding the Sanofi Agreement, see "Business—Collaboration agreement with Sanofi."

In connection with our obligations and responsibilities under the Sanofi Agreement, in April 2019, we entered into a Clinical Supply Agreement with Genzyme Corporation, an affiliate of Sanofi, and a Quality Agreement with Sanofi-Aventis Recherche & Developpement, an affiliate of Sanofi. The Quality Agreement was amended in December 2019. For the purposes of this discussion, we refer to Genzyme Corporation and Sanofi-Aventis Recherche & Developpement, respectively, as Sanofi. At the time both such agreements were entered into, entities affiliated with Sanofi were beneficial owners of (in the aggregate) more than 5% of our capital stock. The Clinical Supply Agreement governs how we will oversee the manufacture and supply of any SHP2 inhibitors requested by Sanofi for use in its clinical development activities under the Sanofi Agreement and provides that Sanofi will compensate us for the costs to manufacture any such product plus a 10% fee. The Quality Agreement requires that the production of RMC-4630 meets certain quality standards and puts certain conditions on our arrangements with subcontractors. The Quality Agreement does not contemplate that any consideration be paid separate from the Sanofi Agreement.

# Policies and procedures for related party transactions

Prior to the consummation of this offering, our board of directors will adopt a written related person transaction policy, to be effective upon the consummation of this offering, setting forth the policies and procedures for the review and approval or ratification of related person transactions. This policy will cover, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which we were or are to be a participant, where the amount involved exceeds \$120,000 and a related person had or will have a direct or indirect material interest, including without limitation purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person. In reviewing and approving any such transactions, our audit committee is tasked to consider all relevant facts and circumstances, including but not limited to whether the transaction is on terms comparable to those that could be obtained in an arm's length transaction with an unrelated third party and the extent of the related person's interest in the transaction. All of the transactions described in this section occurred prior to the adoption of this policy.

# **Principal stockholders**

The following table sets forth information relating to the beneficial ownership of our common stock as of September 30, 2019, by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our outstanding shares of common stock;
- · each of our current directors;
- · each of our named executive officers; and
- · all current directors and executive officers as a group.

The number of shares beneficially owned by each entity, person, director or executive officer is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days of September 30, 2019 through the exercise of any stock option, warrants or other rights. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of common stock held by that person.

The percentage of shares beneficially owned is computed on the basis of 208,767,455 shares of our common stock outstanding as of September 30, 2019, which reflects the assumed conversion of all of our outstanding shares of preferred stock into an aggregate of 192,699,975 shares of common stock. Shares of our common stock that a person has the right to acquire within 60 days of September 30, 2019 are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all directors and executive officers as a group. The percentage ownership information under the column titled "Beneficial ownership after this offering" is based on the sale of shares of common stock in this offering, assuming no exercise of the underwriters' option to purchase additional shares. Unless otherwise indicated below, the address for each beneficial owner listed is c/o Revolution Medicines, Inc., 700 Saginaw Drive, Redwood City, California 94063.

	Bene	ficial ownership	prior to this off	ering		vnership after ffering
Name of beneficial owner	Number of outstanding shares beneficially owned	Number of shares exercisable within 60 days	Number of shares beneficially owned	Percentage of beneficial ownership	Number of shares beneficially owned	Percentage of beneficial ownership
5% and Greater Stockholders:						
Entities affiliated with Third Rock						
Ventures(1)	60,112,163	_	60,112,163	28.8%		%
Entities affiliated with The Column						
Group(2)	38,818,769	_	38,818,769	18.6%		%
Sanofi Research Invest, LLC(3)	16,364,939	_	16,364,939	7.8%		%

	Benef	icial ownership	prior to this of	fering		vnership after ffering
Name of beneficial owner	Number of outstanding shares beneficially owned	Number of shares exercisable within 60 days	Number of shares beneficially owned	Percentage of beneficial ownership	Number of shares beneficially owned	Percentage of beneficial ownership
Named Executive Officers and						
Directors:	3,100,000	7,613,298	10,713,298	5.0%		%
Mark A. Goldsmith, M.D., Ph.D.(4) Steve Kelsey, M.D., FRCP, FRCPath(5)	1,304,160	1,606,020	2,910,180	1.4%		% %
Margaret Horn, J.D.(6)	650,873	2,259,307	2,910,180	1.4%		%
Elizabeth McKee Anderson(7)	180.000	151,240	331,240	1. <del>-1</del> /0 *		% %
Alexis Borisy(8)	100,000	354,900	354,900	*		%
Neil Exter(9)	60,112,163		60,112,163	28.8%		%
Larry Lasky, Ph.D.		_	-	20.070		%
Vincent A. Miller, M.D.(10)	150.000	157,580	307,580	*		%
Thilo Schroeder, Ph.D.			30.,000	_		%
Barbara Weber, M.D.(11)	_	307,580	307,580	*		%
All current directors and executive officers		231,000	23.,000			,,
as a group (10 persons)	65,497,196	12,449,925	77,947,121	35.2%		%

<sup>\*</sup> Indicates beneficial ownership of less than 1% of the total outstanding common stock.

<sup>(1)</sup> Consists of (i) 2,000,000 shares of common stock directly held by Third Rock Ventures III, L.P. ("TRV III"), (ii) 40,002,465 shares of common stock issuable upon the conversion of the Series A preferred stock directly held by TRV III, (iii) 5,000,000 shares of common stock issuable upon the conversion of the Series A preferred stock directly held by Third Rock Ventures IV, L.P. ("TRV IV"), (iv) 9,290,928 shares of common stock issuable upon the conversion of the Series B preferred stock directly held by TRV III, (ii) 1,666,667 shares of common stock issuable upon the conversion of the Series B preferred stock directly held by TRV III, (ii) 1,666,667 shares of common stock issuable upon the conversion of the Series B preferred stock directly held by TRV III, (iii) 242,719 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TRV III and (viii) 242,718 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TRV III and (viii) 242,718 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TRV III and (viii) 242,718 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TRV IV. Each of Third Rock Ventures III GP, LP ("TRV III GP"), the general partner of TRV II LC, may be deemed to have voting and investment power over the shares held of record by TRV III, each of Third Rock Ventures III GP, LP ("TRV III GP"), the general partner of TRV III LC, may be deemed to have voting and investment power over the shares held of record by TRV III; the general partner of TRV IV is Third Rock Ventures GP IV, L.P. ("TRV IV GP") and the general partner of TRV IV GP is TRV GP is TRV GP IV, LLC ("TRV IV LLC"); Abbie Celniker, Ph.D., Robert Tepper, M.D., Craig Muir and Cary Pfeffer, M.D. are the managing members of TRV IV LL and collectively make voting and investment decisions with respect to the shares held by TRV LP. The address for each of these

<sup>(2)</sup> Consists of (i) 11,740,876 shares of common stock issuable upon the conversion of the Series A preferred stock directly held by The Column Group III, LP ("TCG III-A"), (iii) 13,259,124 shares of common stock issuable upon the conversion of the Series A preferred stock directly held by The Column Group III-A, LP ("TCG III-A"), (iii) 3,130,900 shares of common stock issuable upon the conversion of the Series B preferred stock directly held by TCG III, (iv) 3,535,766 shares of common stock issuable upon the conversion of the Series B preferred stock directly held by TCG III-A, (v) 3,333,333 shares of common stock issuable upon the conversion of Series B preferred stock directly held by Ponoi Capital, LP ("Ponoi"), (vi) 3,333,333 shares of common stock issuable upon the conversion of Series B preferred stock directly held by Ponoi Capital II, LP ("Ponoi II"), (vii) 227,978 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TCG III and (viii) 257,459 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TCG III and (viii) 257,459 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TCG III and (viii) 257,459 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TCG III and (viii) 257,459 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TCG III and (viii) 257,459 shares of common stock issuable upon the conversion of the Series C preferred stock directly held by TCG III and (viii) 257,459 shares of common stock issuable upon the conversion of the Series B preferred stock directly held by TCG III and TCG III-A. David Goeddel, Ph.D., Peter Svennilson and Tim Kutzkey, Ph.D., are the managing partners of (i) The Column Group III GP, LP, which is the general partner of TCG III And TCG III-A, (ii) Ponoi Management, LLC, which is the general partner of Ponoi II. Dr. Goeddel, Mr. S

- (3) Consists of 16,364,939 shares of common stock issuable upon the conversion of the Series B preferred stock. Sanofi Research Invest, LLC is a wholly owned indirect subsidiary of Sanofi. Sanofi has the ability to exercise voting and investment power over the shares held by Sanofi Research Invest, LLC. The address for Sanofi Research Invest, LLC is 3711 Kennett Pike, Suite 200, Greenville, DE 19807.
- (4) Consists of (i) 700,000 shares of common stock directly held by the Goldsmith Children 2011 Irrevocable Education Trust, (ii) 2,400,000 shares of common stock directly held by Mark A. Goldsmith and Anne E. Midler 2002 Revocable Living Trust and (iii) 7,613,298 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of September 30, 2019.
- (5) Consists of (i) 1,304,160 shares of common stock and (ii) 1,606,020 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of September 30, 2019.
- (6) Consists of (i) 50,873 shares of common stock directly held by Ms. Horn, (ii) 600,000 shares of common stock directly held by Margaret A. Horn Revocable Living Trust and (iii) 2,259,307 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of September 30, 2019.
- (7) Consists of (i) 180,000 shares of common stock directly held by David W. Anderson 1996 Irrevocable Trust and (ii) 151,240 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of September 30, 2019.
- (8) Consists of 354,900 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of September 30, 2019.
- (9) Consists of the shares described in Footnote 1 above. Mr. Exter disclaims beneficial ownership of all such shares except to the extent of his pecuniary interests therein.
- (10) Consists of (i) 150,000 shares of common stock held directly by Dr. Miller and (ii) 157,580 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of September 30, 2019.
- (11) Consists of 307,580 shares of common stock that may be acquired pursuant to the exercise of stock options within 60 days of September 30, 2019.

# **Description of capital stock**

The following summary describes our capital stock and certain provisions of our amended and restated certificate of incorporation and our amended and restated bylaws, which will become effective immediately prior to the consummation of this offering, the amended and restated investors' rights agreement to which we and certain of our stockholders are parties and of the Delaware General Corporation Law. Because the following is only a summary, it does not contain all of the information that may be important to you. For a complete description, you should refer to our amended and restated certificate of incorporation, amended and restated bylaws and amended and restated investors' rights agreement, copies of which have been filed as exhibits to the registration statement of which this prospectus is part.

### General

Immediately prior to the consummation of this offering, we will file our amended and restated certificate of incorporation that authorizes shares of common stock, \$0.0001 par value per share, and shares of preferred stock, \$0.0001 par value per share. As of September 30, 2019, there were outstanding:

- 208,767,455 shares of our common stock, on an as-converted basis, held by approximately 200 stockholders of record; and
- 22,728,675 shares of our common stock issuable upon exercise of outstanding stock options.

In connection with this offering, we expect to consummate a -for-reverse stock split of our common stock and preferred stock.

# **Common stock**

# Voting rights

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our stockholders do not have cumulative voting rights in the election of directors. Accordingly, holders of a majority of the voting shares are able to elect all of the directors. In addition, the affirmative vote of holders of 66-2/3% of the voting power of all of the then outstanding voting stock will be required to take certain actions, including amending certain provisions of our amended and restated certificate of incorporation, such as the provisions relating to amending our amended and restated bylaws, the classified board and director liability.

#### **Dividends**

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

### Liquidation

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

### Rights and preferences

Holders of our common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate in the future.

### Fully paid and nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

### **Preferred stock**

As of September 30, 2019, there were 192,699,675 shares of preferred stock outstanding, held of record by 134 stockholders. Immediately upon the consummation of this offering, all 192,699,675 outstanding shares of our preferred stock as of September 30, 2019 will be converted into an equivalent number of shares of our common stock. See Note 8 to our consolidated financial statements included elsewhere in this prospectus for a description of our currently outstanding preferred stock. Immediately prior to the consummation of this offering, our amended and restated certificate of incorporation will be amended and restated to delete all references to such shares of preferred stock. From and after the consummation of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. Immediately after consummation of this offering, no shares of preferred stock will be outstanding, and we have no present plan to issue any shares of preferred stock.

# **Options**

As of September 30, 2019, we had outstanding options to purchase 22,728,675 shares of our common stock, with a per share weighted-average exercise price of \$0.69, under our 2014 Equity Incentive Plan.

# **Registration rights**

Under our amended and restated investors' rights agreement, based on the number of shares outstanding as of September 30, 2019, following the consummation of this offering, the holders of approximately 193 million shares of common stock, or their transferees, have the right to require us to register their shares under the Securities Act so that those shares may be publicly resold, and the holders of approximately 193 million shares of common stock, or their transferees, have the right to include their shares in any registration statement we file, in each case as described below.

### Form S-1 demand registration rights

After the consummation of this offering, the holders of approximately 193 million shares of our common stock (on an as-converted basis), or their transferees, will be entitled to certain Form S-1 demand registration rights.

Beginning 180 days following the effectiveness of the registration statement of which this prospectus is a part, the holders of at least a majority of these shares can request that we register all or a portion of their shares, so long as such holders request that we register at least 40% of the shares entitled to these demand registration rights. These stockholders may make up to two requests for registration on Form S-1.

### Form S-3 demand registration rights

After the consummation of this offering, the holders of approximately 193 million shares of our common stock (on an as-converted basis), or their transferees, will be entitled to certain Form S-3 demand registration rights. If we are eligible to use a Form S-3 registration statement, the holders of at least 20% of these shares can request that we register all or a portion of their shares on a Form S-3 registration statement if the anticipated aggregate offering price is at least \$5.0 million, net of certain expenses related to the sale of the shares. These stockholders may make unlimited requests for registration on Form S-3, provided that we are not obligated to effect, or take any action to effect, a registration on Form S-3 if we have effected two registrations on Form S-3 pursuant to requests by these stockholders within the 12 month period immediately preceding such request.

### Piggyback registration rights

After the consummation of this offering, in the event that we determine to register any of our securities under the Securities Act (subject to certain exceptions), either for our own account or for the account of other security holders, the holders of approximately 193 million shares of our common stock (on an as-converted basis), or their transferees, will be entitled to certain "piggyback" registration rights allowing the holders to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to certain registrations, including related to the sale of securities to employees pursuant to employee benefit plans, the offer and sale of debt securities, or an SEC Rule 145 transaction, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration. In an underwritten offering, the underwriters have the right, subject to specified conditions, to limit the number of shares such holders may include.

### Expenses of registration

We will pay the registration expenses, excluding certain expenses related to the sale of shares, of the holders of the shares registered pursuant to the Form S-1 demand, Form S-3 demand and piggyback registration rights described above, including the reasonable expenses of one counsel for the selling holders not to exceed \$25,000.

### Expiration of registration rights

The Form S-1 demand, Form S-3 demand and piggyback registration rights described above will terminate, with respect to any particular stockholder, upon the earlier of (i) five years after the consummation of this offering, (ii) following this offering, the date that Rule 144 or another similar exemption under the Securities Act is available to such stockholder for the sale of all of such stockholder's shares without limitation during a three-month period, or (iii) upon the consummation of a merger, consolidation or the sale of substantially all of our assets.

# Anti-takeover effects of provisions of our amended and restated certificate of incorporation, our amended and restated bylaws and Delaware law

Some provisions of Delaware law and our amended and restated certificate of incorporation and our amended and restated bylaws that will become effective immediately prior to the consummation of this offering contain provisions that could make the following transactions more difficult: acquisition of us by means of a tender offer; acquisition of us by means of a proxy contest or otherwise; or removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions that might result in a premium over the market price for our shares.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

#### Delaware anti-takeover statute

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits persons deemed "interested stockholders" from engaging in a "business combination" with a publicly-held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an "interested stockholder" is a person who, together with affiliates and associates, beneficially owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors, such as discouraging takeover attempts that might result in a premium over the market price of our common stock.

### Undesignated preferred stock

The ability to authorize undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management of our company.

### Special stockholder meetings

Our amended and restated bylaws provide that a special meeting of stockholders may be called by our board of directors, or by our President, Chief Executive Officer or the Chair of our board of directors.

# Requirements for advance notification of stockholder nominations and proposals

Our amended and restated bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

### Elimination of stockholder action by written consent

Our amended and restated certificate of incorporation and our amended and restated bylaws eliminate the right of stockholders to act by written consent without a meeting.

### Classified board; election and removal of directors; filling vacancies

Our board of directors is divided into three classes. The directors in each class will serve for a three-year term, one class being elected each year by our stockholders, with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the shares of common stock outstanding will be able to elect all of our directors. Our amended and restated certificate of incorporation provides for the removal of any of our directors only for cause and requires a stockholder vote by the holders of at least a 66-2/3% of the voting power of the then outstanding voting stock. For more information on the classified board, see "Management—Board composition." Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of the board, may only be filled by a resolution of the board of directors unless the board of directors determines that such vacancies shall be filled by the stockholders. This system of electing and removing directors and filling vacancies may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

### Choice of forum

Our amended and restated certificate of incorporation to be in effect immediately prior to the consummation of this offering provides that the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any state law derivative action or proceeding brought on behalf us, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors or officers to us or our stockholders, (iii) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law or our amended and restated certificate of incorporation or amended and restated bylaws or (iv) any action asserting a claim against us governed by the internal affairs doctrine. As a result, any action brought by any of our stockholders with regard to any of these matters will need to be filed in the Court of Chancery of the State of Delaware and cannot be filed in any other jurisdiction; provided that, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Securities Act, the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction; and provided further that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Nothing in our amended and restated certificate of incorporation or amended and restated bylaws will preclude stockholders that assert claims under the Securities Act or the Exchange Act from bringing such claims in state or federal court, subject to applicable law.

This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder.

# Amendment of certificate of incorporation provisions

The amendment of any of the above provisions, except for the provision making it possible for our board of directors to issue undesignated preferred stock, would require approval by a stockholder vote by the holders of at least a 66-2/3% of the voting power of the then outstanding voting stock.

The provisions of the Delaware General Corporation Law, our amended and restated certificate of incorporation and our amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

### Limitations of liability and indemnification matters

For a discussion of liability and indemnification, see "Management-Limitation of liability and indemnification matters."

# Nasdaq global market listing

We have applied to have our common stock approved for listing on the Nasdaq Global Market under the symbol "RVMD."

# Transfer agent and registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, New York 11219.

# Shares eligible for future sale

Prior to this offering, there has been no public market for our common stock, and we cannot assure investors that an active trading market for our common stock will develop or be sustained after this offering. Future sales of our common stock, including shares issued upon the exercise of outstanding options or warrants, in the public market after this offering, or the perception that those sales may occur, could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future. As described below, only a limited number of shares of our common stock will be available for sale in the public market for a period of several months after consummation of this offering due to contractual and legal restrictions on resale described below.

Future sales of our common stock in the public market either before (to the extent permitted) or after restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price of our common stock at such time and our ability to raise equity capital at a time and price we deem appropriate.

### Sale of restricted shares

Based on the number of shares of our common stock outstanding as of September 30, 2019 and assuming an initial public offering price of \$\text{per share}\$ (the midpoint of the price range set forth on the cover of this prospectus), upon the consummation of this offering and assuming (1) the conversion of all shares of our outstanding preferred stock as of September 30, 2019, (2) no exercise of the underwriters' option to purchase additional shares of common stock and (3) no exercise of any of our other outstanding options, we will have outstanding an aggregate of shares of common stock.

All of the shares of common stock to be sold in this offering, and any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable in the public market without restriction or further registration under the Securities Act, unless the shares are held by any of our "affiliates" as such term is defined in Rule 144 of the Securities Act. All remaining shares of common stock held by existing stockholders immediately prior to the consummation of this offering will be "restricted securities" as such term is defined in Rule 144. These restricted securities were issued and sold by us, or will be issued and sold by us, in private transactions and are eligible for public sale only if registered under the Securities Act or if they qualify for an exemption from registration under the Securities Act, including the exemptions provided by Rule 144 or Rule 701, which rules are summarized below.

As a result of the lock-up agreements referred to below and the provisions of Rule 144 and Rule 701 under the Securities Act, based on the number of shares of our common stock outstanding as of September 30, 2019 and assumptions (1)-(3) described above, the shares of our common stock (excluding the shares sold in this offering) that will be available for sale in the public market are as follows:

Approximate number of shares	First date available for sale into public market
shares	180 days after the date of this prospectus upon expiration of the lock-up agreements referred to below,
	subject in some cases to applicable volume limitations under Rule 144

# Lock-up agreements

In connection with this offering, we, our directors, our executive officers and substantially all of our other stockholders and option holders have agreed, subject to certain exceptions, with the underwriters not to

dispose of or hedge any shares of our common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of the lock-up agreement continuing through the date 180 days after the date of this prospectus, except with the prior written consent of J.P. Morgan Securities LLC. See the section titled "Underwriting" for additional information.

Subject to certain limitations, certain of our employees, including our executive officers, and/or directors may enter into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements relating to the offering described above.

Following the lock-up periods set forth in the agreements described above, and assuming that J.P. Morgan Securities LLC of the underwriters does not release any parties from these agreements, all of the shares of our common stock that are restricted securities or are held by our affiliates as of the date of this prospectus will be eligible for sale in the public market in compliance with Rule 144 under the Securities Act.

# **Rule 144**

In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act, for at least 90 days, a person (or persons whose shares are required to be aggregated) who is not deemed to have been one of our "affiliates" for purposes of Rule 144 at any time during the three months preceding a sale, and who has beneficially owned restricted securities within the meaning of Rule 144 for at least six months, including the holding period of any prior owner other than one of our "affiliates," is entitled to sell those shares in the public market (subject to the lock-up agreement referred to above, if applicable) without complying with the manner of sale, volume limitations or notice provisions of Rule 144, but subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than "affiliates," then such person is entitled to sell such shares in the public market without complying with any of the requirements of Rule 144 (subject to the lock-up agreement referred to above, if applicable). In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, our "affiliates," as defined in Rule 144, who have beneficially owned the shares proposed to be sold for at least six months are entitled to sell in the public market, upon expiration of any applicable lock-up agreements and within any three-month period, a number of those shares of our common stock that does not exceed the greater of:

- 1% of the number of shares of common stock then outstanding, which will equal approximately shares of common stock immediately after this offering (calculated as of September 30, 2019 on the basis of the assumptions (1)-(3) described above); or
- the average weekly trading volume of our common stock on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Such sales under Rule 144 by our "affiliates" or persons selling shares on behalf of our "affiliates" are also subject to certain manner of sale provisions, notice requirements and to the availability of current public information about us. Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted securities have entered into lock-up agreements as referenced above and their restricted securities will become eligible for sale (subject to the above limitations under Rule 144) upon the expiration of the restrictions set forth in those agreements.

### **Rule 701**

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants or advisors who acquired common stock from us in connection with a written compensatory stock or option plan or other written agreement in compliance with Rule 701 under the Securities Act before the effective date of the registration statement of which this prospectus is a part (to the extent such common stock is not subject to a lock-up agreement) is entitled to rely on Rule 701 to resell such shares beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act in reliance on Rule 144, but without compliance with the holding period requirements contained in Rule 144. Accordingly, subject to any applicable lock-up agreements, beginning 90 days after we become subject to the public company reporting requirements of the Exchange Act, under Rule 701 persons who are not our "affiliates," as defined in Rule 144, may resell those shares without complying with the minimum holding period or public information requirements of Rule 144, and persons who are our "affiliates" may resell those shares without compliance with Rule 144's minimum holding period requirements (subject to the terms of the lock-up agreement referred to above).

# **Registration rights**

After the consummation of this offering, the holders of approximately 193 million shares of our common stock, or their transferees, will, subject to the lock-up agreements referred to above, be entitled to certain rights with respect to the registration of the offer and sale of those shares under the Securities Act. For a description of these registration rights, see "Description of capital stock—Registration rights." If the offer and sale of these shares are registered, they will be freely tradable without restriction under the Securities Act.

# Stock plans

We intend to file with the SEC a registration statement under the Securities Act covering the shares of common stock reserved for issuance under our 2014 Equity Incentive Plan, our 20 Incentive Award Plan and our 20 Employee Stock Purchase Plan. Such registration statement is expected to be filed and become effective as soon as practicable after the consummation of this offering. Accordingly, shares registered under such registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

# Material U.S. federal income tax consequences to non-U.S. holders

The following discussion is a summary of the material U.S. federal income tax consequences to Non-U.S. Holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended ("the Code"), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service ("the IRS"), in each case in effect as of the date hereof.

These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a Non-U.S. Holder. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to Non-U.S. Holders that hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a Non-U.S. Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to Non-U.S. Holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- · persons subject to the alternative minimum tax;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- · banks, insurance companies and other financial institutions;
- · brokers, dealers or traders in securities;
- "controlled foreign corporations," "passive foreign investment companies" and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- · tax-exempt organizations or governmental organizations;
- · persons deemed to sell our common stock under the constructive sale provisions of the Code;
- · tax-qualified retirement plans; and
- "qualified foreign pension funds" as defined in Section 897(I)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds.

If an entity treated as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

### Definition of non-U.S. holder

For purposes of this discussion, a "Non-U.S. Holder" is any beneficial owner of our common stock that is neither a "U.S. person" nor an entity treated as a partnership for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- · an individual who is a citizen or resident of the United States;
- a corporation created or organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and all substantial decisions of which are subject to the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code), or (2) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

### **Distributions**

As described in the section of this prospectus titled "Dividend policy," we have never declared or paid cash dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "—Sale or other taxable disposition."

Subject to the discussion below regarding effectively connected income, dividends paid to a Non-U.S. Holder will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable tax treaties.

If dividends paid to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

#### Sale or other taxable disposition

Subject to the discussion below regarding backup withholding, a Non-U.S. Holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our common stock unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such gain is attributable);
- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitutes a U.S. real property interest ("USRPI"), by reason of our status as a U.S. real property holding corporation ("USRPHC"), for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by certain U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a Non-U.S. Holder will not be subject to U.S. federal income tax if our common stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such Non-U.S. Holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period.

Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

#### Information reporting and backup withholding

Payments of dividends on our common stock will not be subject to backup withholding, provided the Non-U.S. Holder certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any dividends on our common stock paid to the Non-U.S. Holder, regardless of whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our common stock within

the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting if the applicable withholding agent receives the certification described above or the Non-U.S. Holder otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. office of a non-U.S. broker that does not have certain enumerated relationships with the United States generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

#### Additional withholding tax on payments made to foreign accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act ("FATCA")) on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or (subject to the proposed Treasury Regulations discussed below) gross proceeds from the sale or other disposition of, our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our common stock. While, beginning on January 1, 2019, withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of our common stock, recently proposed Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

## **Underwriting**

We are offering the shares of common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, Cowen and Company, LLC, SVB Leerink LLC and Guggenheim Securities, LLC are acting as book-running managers of the offering and as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the initial public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of common stock listed next to its name in the following table:

Name	Number of shares
J.P. Morgan Securities LLC	
Cowen and Company, LLC	
SVB Leerink LLC	
Guggenheim Securities, LLC	
Total	

The underwriters are committed to purchase all the shares of common stock offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common stock directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$ per share. After the initial offering of the shares to the public, if all of the common stock is not sold at the initial public offering price, the underwriters may change the offering price and the other selling terms. Sales of shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to purchase up to additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased with this option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriters do not expect to sell more than 5% of the shares of common stock in the aggregate to accounts over which they exercise discretionary authority.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The underwriting fee is \$ per share. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without option to purchase additional shares exercise	With full option to purchase additional shares exercise
Per Share	\$	\$
Total	\$	\$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately \$\frac{1}{2}\$. We have agreed to reimburse the underwriters for expenses of up to \$\frac{1}{2}\$ relating to the clearance of this offering with the Financial Industry Regulatory Authority.

A prospectus in electronic format may be made available on the websites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed that we will not (i) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, or file with the Securities and Exchange Commission, or SEC, a registration statement under the Securities Act of 1933, relating to, any shares of our common stock or any securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, or (ii) enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of any shares of common stock or any such other securities (regardless of whether any of these transactions are to be settled by the delivery of shares of common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC for a period of 180 days after the date of this prospectus, other than the shares of our common stock to be sold hereunder and any shares of our common stock issued upon the exercise of options granted under our existing stock-based compensation plans.

Our directors, executive officers and the holders of substantially all of our common stock, stock options and other securities convertible into, exercisable or exchangeable for our common stock have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each of these persons or entities, with limited exceptions, for a period of 180 days after the date of this prospectus, may not, without the prior written consent of J.P. Morgan Securities LLC, (1) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including, without limitation, common stock or such other securities which may be deemed to be beneficially owned by such directors, executive officers and stockholders in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) or (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the common stock or such other securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of common stock or such other securities, in cash or otherwise, or (3) make any demand for or exercise any right with respect to the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock.

The restrictions described in the immediately preceding paragraph are subject to specified exceptions, including among other items:

- · subject to certain limitations, transfers as a bona fide gift or gifts;
- · subject to certain limitations, transfers by will, other testamentary document or intestacy;

- subject to certain limitations, transfers to any trust for the direct or indirect benefit of the transferor or the immediate family of the transferor, or if the transferor is a trust, to a trustor or beneficiary of the trust, or to the estate of a beneficiary of such trust;
- subject to certain limitations, transfers to a partnership, limited liability company or other entity of which the transferor and/or the immediate family of the transferor are the legal and beneficial owner of all of the outstanding equity securities or similar interests;
- subject to certain limitations, if the transferor is a corporation, partnership, limited liability company, trust or other business entity, transfers as part of a distribution to the members, partners, stockholders or other equityholders of the transferor, or to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate of the transferor, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the transferor or its affiliates;
- subject to certain limitations, transfers by operation of law pursuant to a qualified domestic order, divorce settlement, divorce decree, separation agreement or other court order;
- transfers to us from an employee or other service provider upon death, disability or termination of employment or service, in each case, of such employee or service provider;
- · subject to certain limitations, sales or transfers of shares acquired in this offering, or on the open market after this offering;
- subject to certain limitations, transfers to us to cover tax withholdings upon a vesting, exercise or settlement event of any equity award granted under a stock incentive plan, stock purchase plan or other equity award plan;
- subject to certain limitations, transfers to us by way of cashless exercise of (i) an option to purchase common stock granted under a stock incentive plan, stock purchase plan or other equity award plan or (ii) a warrant, in either case described in this prospectus;
- transfers pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction made to all holders of our common stock involving a change of control that has been approved by our board of directors; and
- · subject to certain limitations, the establishment of a trading plan pursuant to Rule 10b5-1 of the Exchange Act.

J.P. Morgan Securities LLC, in its sole discretion, may release the common stock subject to the lock-up agreements described above in whole or in part at any time with or without notice.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

We have applied to have our common stock approved for listing on the Nasdaq Global Market under the symbol "RVMD."

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of common stock in the open market for the purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of the common stock, which involves the sale by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering, and

purchasing shares of common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act of 1933, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on the Nasdag Global Market, in the over-the-counter market or otherwise.

Prior to this offering, there has been no public market for our common stock. The initial public offering price will be determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters expect to consider a number of factors including:

- the information set forth in this prospectus and otherwise available to the representatives;
- · our prospects and the history and prospects for the industry in which we compete;
- · an assessment of our management;
- · our prospects for future earnings;
- · the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and
- · other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for our common stock, or that the shares will trade in the public market at or above the initial public offering price.

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and

hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

#### **Selling restrictions**

#### General

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

#### Notice to prospective investors in the European Economic Area

In relation to each Member State of the European Economic Area (each a "Member State"), no shares have been offered or will be offered pursuant to the offering to the public in that Member State prior to the publication of a prospectus in relation to the Shares which has been approved by the competent authority in that Member State or, where appropriate, approved in another Member State and notified to the competent authority in that Member State, all in accordance with the Prospectus Regulation), except that offers of shares may be made to the public in that Member State at any time under the following exemptions under the Prospectus Regulation:

- i. to any legal entity which is a qualified investor as defined under the Prospectus Regulation;
- ii. to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- iii. in any other circumstances falling within Article 1(4) of the Prospectus Regulation;

provided that no such offer of shares shall require the issuer or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation and each person who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and us that it is a "qualified investor" within the meaning of Article 2(e) of the Prospectus Regulation. In the case of any shares being offered to a financial intermediary as that term is used in the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Member State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters have been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an "offer to the public" in relation to any shares in any Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

#### Notice to prospective investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Regulation) (i) who have professional experience in matters relating to investments falling within Article 19 (5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended, or the Order and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order, all such persons together being referred to as "relevant persons" or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares in the United Kingdom within the meaning of the Financial Services and Markets Act 2000.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

#### Notice to prospective investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

#### Notice to prospective investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority, or FINMA, and the offer of shares has not been and will not be authorized under the

Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

#### Notice to prospective investors in the Dubai International Financial Centre, or DIFC

This document relates to an Exempt Offer in accordance with the Markets Rules 2012 of the Dubai Financial Services Authority ("DFSA"). This document is intended for distribution only to persons of a type specified in the Markets Rules 2012 of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for this document. The securities to which this document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this document you should consult an authorized financial advisor.

In relation to its use in the DIFC, this document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The interests in the securities may not be offered or sold directly or indirectly to the public in the DIFC.

#### Notice to prospective investors in the United Arab Emirates

The shares have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the Dubai International Financial Centre) other than in compliance with the laws of the United Arab Emirates (and the Dubai International Financial Centre) governing the issue, offering and sale of securities. Further, this prospectus does not constitute a public offer of securities in the United Arab Emirates (including the Dubai International Financial Centre) and is not intended to be a public offer. This prospectus has not been approved by or filed with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority or the Dubai Financial Services Authority.

#### Notice to prospective investors in Australia

This prospectus:

- does not constitute a disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001 (Cth) (the "Corporations Act");
- has not been, and will not be, lodged with the Australian Securities and Investments Commission, or ASIC, as a disclosure document for
  the purposes of the Corporations Act and does not purport to include the information required of a disclosure document for the purposes of
  the Corporations Act; and
- may only be provided in Australia to select investors who are able to demonstrate that they fall within one or more of the categories of investors, available under section 708 of the Corporations Act ("Exempt Investors").

The shares may not be directly or indirectly offered for subscription or purchased or sold, and no invitations to subscribe for or buy the shares may be issued, and no draft or definitive offering memorandum, advertisement or other offering material relating to any shares may be distributed in Australia, except where disclosure to investors is not required under Chapter 6D of the Corporations Act or is otherwise in compliance with all applicable Australian laws and regulations. By submitting an application for the shares, you represent and warrant to us that you are an Exempt Investor.

As any offer of shares under this document will be made without disclosure in Australia under Chapter 6D.2 of the Corporations Act, the offer of those securities for resale in Australia within 12 months may, under section 707 of the Corporations Act, require disclosure to investors under Chapter 6D.2 if none of the exemptions in section 708 applies to that resale. By applying for the shares you undertake to us that you will not, for a period of 12 months from the date of issue of the shares, offer, transfer, assign or otherwise alienate those shares to investors in Australia except in circumstances where disclosure to investors is not required under Chapter 6D.2 of the Corporations Act or where a compliant disclosure document is prepared and lodged with ASIC.

#### Notice to prospective investors in Japan

The shares have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any "resident" of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

#### Notice to prospective investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong), or the SFO, of Hong Kong and any rules made thereunder; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong), or the CO, or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made thereunder.

#### Notice to prospective investors in Singapore

Each underwriter has acknowledged that this prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each underwriter has represented and agreed that it has not offered or sold any shares or caused the shares to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares or cause the shares to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, whether directly or indirectly, to any person in Singapore other than:

- (a) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time, or the SFA) pursuant to Section 274 of the SFA:
- (b) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or
- (c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold
  investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor.

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- (i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4) (i)(B) of the SFA;
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Singapore SFA Product Classification — In connection with Section 309B of the SFA and the CMP Regulations 2018, unless otherwise specified before an offer of shares, we have determined, and hereby notify all relevant persons (as defined in Section 309A(1) of the SFA), that the shares are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

#### Notice to prospective investors in Bermuda

Shares may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

#### Notice to prospective investors in Saudi Arabia

This document may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Offers of Securities Regulations as issued by the board of the Saudi Arabian Capital Market Authority, or CMA, pursuant to resolution number 2-11-2004 dated 4 October 2004 as amended by resolution number 1-28-2008, as amended, or the CMA Regulations. The CMA does not make any representation as to the accuracy or completeness of this document and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorized financial adviser.

#### Notice to prospective investors in the British Virgin Islands

The shares are not being, and may not be offered to the public or to any person in the British Virgin Islands for purchase or subscription by or on behalf of us. The shares may be offered to companies incorporated under the BVI Business Companies Act, 2004 (British Virgin Islands), or BVI Companies, but only where the offer will be made to, and received by, the relevant BVI Company entirely outside of the British Virgin Islands.

#### Notice to prospective investors in China

This prospectus will not be circulated or distributed in the PRC and the shares will not be offered or sold, and will not be offered or sold to any person for re-offering or resale directly or indirectly to any residents of the PRC except pursuant to any applicable laws and regulations of the PRC. Neither this prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with applicable laws and regulations.

#### Notice to prospective investors in Korea

The shares have not been and will not be registered under the Financial Investments Services and Capital Markets Act of Korea, or the FSCMA, and the decrees and regulations thereunder and the shares have been and will be offered in Korea as a private placement under the FSCMA. None of the shares may be offered, sold or delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law of Korea, or the FETL, and the decrees and regulations thereunder. The shares have not been listed on any securities exchanges in the world including, without limitation, the Korea Exchange in Korea. Furthermore, the purchaser of the shares shall comply with all applicable regulatory requirements (including but not limited to requirements under the FETL) in connection with the purchase of the shares. By the purchase of the shares, the relevant holder thereof will be deemed to represent and warrant that if it is in Korea or is a resident of Korea, it purchased the shares pursuant to the applicable laws and regulations of Korea.

#### Notice to prospective investors in Taiwan

The shares have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the shares in Taiwan.

#### Notice to prospective investors in South Africa

Due to restrictions under the securities laws of South Africa, no "offer to the public" (as such term is defined in the South African Companies Act, No. 71 of 2008 (as amended or re-enacted, or the South African Companies Act) is being made in connection with the issue of the shares in South Africa. Accordingly, this document does not, nor is it intended to, constitute a "registered prospectus" (as that term is defined in the South African Companies Act) prepared and registered under the South African Companies Act and has not been approved by, and/or filed with, the South African Companies and Intellectual Property Commission or any other regulatory authority in South Africa. The shares are not offered, and the offer shall not be transferred, sold, renounced or

delivered, in South Africa or to a person with an address in South Africa, unless one or other of the following exemptions stipulated in section 96 (1) applies:

Section 96 (1)(a) the offer, transfer, sale, renunciation or delivery is to:

- (i) persons whose ordinary business, or part of whose ordinary business, is to deal in securities, as principal or agent;
- (ii) the South African Public Investment Corporation;
- (iii) persons or entities regulated by the Reserve Bank of South Africa;
- (iv) authorized financial service providers under South African law;
- (v) financial institutions recognized as such under South African law;
- (vi) a wholly-owned subsidiary of any person or entity contemplated in (c), (d) or (e), acting as agent in the capacity of an authorized portfolio manager for a pension fund, or as manager for a collective investment scheme (in each case duly registered as such under South African law); or
- (vii) any combination of the person in (i) to (vi); or

Section 96 (1)(b)

the total contemplated acquisition cost of the securities, for any single addressee acting as principal is equal to or greater than ZAR1,000,000 or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act.

Information made available in this prospectus should not be considered as "advice" as defined in the South African Financial Advisory and Intermediary Services Act, 2002.

#### Notice to prospective investors in Israel

This document does not constitute a prospectus under the Israeli Securities Law, 5728-1968, or the Securities Law, and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first addendum, or the Addendum, to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and "qualified individuals," each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

### **Legal matters**

The validity of the issuance of our common stock offered in this prospectus will be passed upon for us by Latham & Watkins LLP, Menlo Park, California. Davis Polk & Wardwell LLP, Menlo Park, California, is acting as counsel for the underwriters in connection with this offering. Latham & Watkins LLP and certain attorneys and investment funds affiliated with the firm own shares of our preferred stock which will be converted into an aggregate of 48,544 shares of common stock immediately upon the completion of this offering.

## **Experts**

The financial statements of Revolution Medicines, Inc. as of December 31, 2017 and December 31, 2018 and for each of the two years in the period ended December 31, 2018 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The financial statements of Warp Drive Bio, Inc. as of December 31, 2017 and for the year then ended included in this prospectus have been so included in reliance on the report (which contains an explanatory paragraph relating to the Company's ability to continue as a going concern as described in Note 1 to the financial statements) of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

The financial statements of Warp Drive Bio, Inc. at December 31, 2016 and for the year then ended appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about Warp Drive Bio, Inc.'s ability to continue as a going concern, as described in Note 1 to the financial statements), appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

## Where you can find more information

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information with respect to Revolution Medicines, Inc. and the common stock offered hereby, reference is made to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. The SEC also maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address is www.sec.gov.

Upon consummation of this offering, we will become subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, will file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at www.revmed.com. Upon consummation of this offering, you may access our annual reports on

Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The reference to our website address does not constitute incorporation by reference of the information contained on our website, and you should not consider the contents of our website in making an investment decision with respect to our common stock.

# Revolution Medicines, Inc. Index to consolidated financial statements

	Page
Revolution Medicines, Inc. and subsidiary (audited financial statements for the years ended December 31, 2017 and 2018)	)
Report of Independent Registered Public Accounting Firm	F-2
Consolidated balance sheets	F-3
Consolidated statements of operations and comprehensive loss	F-4
Consolidated statements of redeemable convertible preferred stock and stockholders' deficit	F-5
Consolidated statements of cash flows	F-6
Notes to consolidated financial statements	F-7
Revolution Medicines, Inc. and subsidiary (unaudited condensed interim financial statements for the nine months ended September 30, 2019 and 2018)	
Condensed consolidated balance sheets (unaudited)	F-35
Condensed consolidated statements of operations and comprehensive loss (unaudited)	F-36
Condensed consolidated statements of redeemable preferred stock and shareholder's deficit (unaudited)	F-37
Condensed consolidated statements of cash flows (unaudited)	F-38
Notes to unaudited condensed consolidated financial statements	F-39
Warp Drive Bio, Inc. (audited financial statements for the years ended December 31, 2017 and 2016)	
Report of Independent Auditors	F-67
Report of Independent Auditors	F-68
Balance sheets	F-69
Statements of operations and comprehensive loss	F-70
Statements of convertible preferred stock and stockholders' deficit	F-71
Statements of cash flows	F-72
Notes to the financial statements	F-73
Warp Drive Bio, Inc. (unaudited condensed interim financial statements for the nine months ended September 30, 2018 ar 2017)	ıd
Condensed balance sheets (unaudited)	F-95
Condensed statements of operations and comprehensive loss (unaudited)	F-96
Condensed statements of cash flows (unaudited)	F-97
Notes to the unaudited condensed financial statements	F-98

## Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Revolution Medicines, Inc.

#### **Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Revolution Medicines, Inc. and its subsidiary (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations and comprehensive loss, of redeemable convertible preferred stock and stockholders' deficit and of cash flows for the years then ended, including the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

#### **Basis for Opinion**

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP San Jose, California September 19, 2019

We have served as the Company's auditor since 2017.

# Revolution Medicines, Inc. Consolidated balance sheets

(in thousands, except share and per share data)

	2047		Dag	ember 31,
	2017	2018		2018
<u> </u>			(ເ	ınaudited)
Assets				
Current assets:				
Cash and cash equivalents	\$ 9,079	\$ 69,586		
Receivable from related party	_	7,303		
Prepaid expenses and other current assets	362	1,945		
Assets held for sale		6,597		
Total current assets	9,441	85,431		
Property and equipment, net	5,253	6,872		
Intangible assets, net	_	63,082		
Goodwill	_	14,608		
Restricted cash		214		
Other noncurrent assets	383	379		
Total assets	\$ 15,077	\$ 170,586		
Liabilities, redeemable convertible preferred stock and stockholders' (deficit) equity Current liabilities:				
Accounts payable	\$ 3,353	\$ 5,236		
Accrued expenses and other current liabilities	4,245	8,486		
Deferred revenue, related party, current		16,830		
Total current liabilities	7,598	30,552		
Deferred rent, noncurrent	2,806	2,254		
Deferred revenue, related party, noncurrent	_	28,413		
Deferred tax liability	_	12,192		
Other noncurrent liabilities	142	516		
Total liabilities	10,546	73,927		
Commitments and contingencies (Note 5)  Redeemable convertible preferred stock, \$0.0001 par value; 70,221,732 and 146,221,732 shares authorized at December 31, 2017 and 2018, respectively; 70,221,732 and 144,016,937 shares issued and outstanding at December 31, 2017 and 2018, respectively; aggregate liquidation preference of \$194,133 at December 31, 2018; no shares issued and outstanding, pro forma (unaudited)	72,248	205,081		_
Stockholders' (deficit) equity: Common stock, \$0.0001 par value; 94,695,000 and 172,000,000 shares authorized at				
December 31, 2017 and 2018, respectively; 13,011,059 and 15,615,007 shares issued and outstanding at December 31, 2017 and 2018, respectively; 159,631,944 shares issued and outstanding, pro forma (unaudited)	1	2		16
Additional paid-in capital	215	1,298		206.365
Accumulated deficit	(67,933)	(109,722)		(109,722)
Total stockholders' (deficit) equity	(67,717)	(108,422)	\$	96,659
· · · · · ·	\$ 15,077	\$ 170,586	Ψ	50,000

# Revolution Medicines, Inc. Consolidated statements of operations and comprehensive loss

(in thousands, except share and per share data)

	Year ended December 31,			oer 31,
	2	2017		2018
Revenue:				
Collaboration revenue, related party	\$	_	\$	19,420
Collaboration revenue, other				745
Total revenue		_		20,165
Operating expenses:				
Research and development		26,586		51,084
General and administrative		4,543		9,410
Total operating expenses		31,129		60,494
Loss from operations		(31,129)		(40,329)
Other income (expense), net:				
Interest income		105		777
Interest and other expense		(103)		(116)
Change in fair value of redeemable convertible preferred stock liability		_		(2,121)
Total other income (expense), net		2		(1,460)
Net loss and comprehensive loss	\$	(31,127)	\$	(41,789)
Redeemable convertible preferred stock dividends—undeclared and cumulative		(3,763)		(7,031)
Net loss attributable to common stockholders	\$	(34,890)	\$	(48,820)
Net loss per share attributable to common stockholders—basic and diluted	\$	(4.16)	\$	(4.36)
Weighted-average shares used to compute net loss per share attributable to common				
stockholders—basic and diluted	8,3	386,173	1	1,186,287
Pro forma net loss per share—basic and diluted (unaudited)			\$	(0.35)
Weighted-average shares used in computing pro forma net loss per share—basic and diluted				
(unaudited)			11	2,714,741

# Revolution Medicines, Inc. Consolidated statements of redeemable convertible preferred stock and stockholders' deficit

(in thousands, except share data)

	Redeem convert preferred	tible	Common	stock	Additional paid-in	Accumulated	Total stockholders'
	Shares	Amount	Shares	Amount	capital	deficit	deficit
Balance at January 1, 2017	47,527,465	\$ 49,579	11,814,916	\$ 1		\$ (36,806)	\$ (36,805)
Issuance of Series A redeemable convertible preferred stock for cash at \$1.00 per share, net of issuance costs of \$25	22,694,267	22,669	_	_	_	_	_
Issuance of common stock pursuant to stock option exercises	_	_	446,277	_	37	_	37
Issuance of common stock pursuant to early exercised stock options	_	_	2,364,680	_	_	<u>_</u>	_
Vesting of early exercised stock options and restricted stock	_	_	_	_	37	_	37
Repurchases of early exercised stock options and restricted stock	_	_	(1,614,814)	_	_	_	_
Stock-based compensation expense	_	_	_	_	141	_	141
Net loss						(31,127)	(31,127)
Balance at December 31, 2017	70,221,732	\$ 72,248	13,011,059	\$ 1	\$ 215	\$ (67,933)	\$ (67,717)
Issuance of Series B redeemable convertible preferred stock for cash at \$1.50 per share, net of issuance costs of \$204, adjusted for the redeemable convertible preferred stock liability of \$2,121	37,620,613	58,347	_	_	_	_	_
Issuance of Series B redeemable convertible preferred stock on acquisition of Warp Drive	33,079,554	68,144	_	_	_	_	_
Convertible note payable converted into Series B redeemable convertible preferred stock	975,620	2,010	_	_	_	_	_
Issuance of Series B redeemable convertible preferred stock for cash at \$2.06 per share, net of issuance costs of \$34	2,119,418	4,332	_	_	_	_	_
Issuance of common stock pursuant to stock option exercises	_	_	521,704	_	47	_	47
Issuance of common stock pursuant to early exercised stock options	_	_	2,659,858	_	_	_	_
Vesting of early exercised stock options and restricted stock	_	_	_	1	181	_	182
Repurchases of early exercised stock options	_	_	(577,614)	_	_		.=
Stock-based compensation expense	_		_	_	855		855
Net loss						(41,789)	(41,789)
Balance at December 31, 2018	144,016,937	\$205,081	15,615,007	\$ 2	\$ 1,298	\$ (109,722)	\$ (108,422)

# Revolution Medicines, Inc. Consolidated statements of cash flows

(in thousands)

		Year o	
		2017	2018
Cash flows from operating activities			
Net loss	\$(	31,127)	\$ (41,789)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:			
Amortization of intangible assets		_	198
Stock-based compensation expense		141	855
Depreciation and amortization		1,188	1,566
Loss on disposal of property and equipment		_	201
Change in fair value of redeemable convertible preferred stock liability		_	2,121
Changes in operating assets and liabilities, net of impact of acquisition:			
Receivable from related party			(7,303)
Prepaid expenses and other current assets		553	(909)
Accounts payable		1,968	109
Accrued expenses and other current liabilities		2,029	1,906
Deferred revenue, related party		400	44,499
Deferred rent		100	(552)
Other noncurrent liabilities		<del>-</del>	311
Net cash provided by (used in) operating activities	(	25,148)	1,213
Cash flows from investing activities			
Purchases of property and equipment		(1,575)	(1,499)
Cash acquired in Warp Drive acquisition, net		_	160
Net cash used in investing activities		(1,575)	(1,339)
Cash flows from financing activities			
Proceeds from issuance of redeemable convertible preferred stock, net of issuance costs		22,588	60,558
Proceeds from issuance of common stock under equity incentive plans		74	420
Repurchases of early exercised stock options and restricted stock		_	(131)
Net cash provided by financing activities		22,662	60,847
Net (decrease) increase in cash, cash equivalents and restricted cash		(4,061)	60,721
Cash, cash equivalents and restricted cash—beginning of year	_	13,140	9,079
Cash, cash equivalents and restricted cash—end of year	\$	9,079	\$ 69,800
Reconciliation of cash, cash equivalents and restricted cash to consolidated balance sheets	Ψ	0,010	φ σσ,σσσ
Cash and cash equivalents	\$	9,079	\$ 69,586
Restricted cash	Ф	9,079	214
Cash, cash equivalents and restricted cash—end of year	\$	9,079	\$ 69,800
·	φ	9,019	\$ 09,000
Supplemental disclosure of non-cash investing and financing activities	¢.	27	¢ 100
Vesting of early exercised options and restricted stock Purchases of property and equipment within accounts payable and accrued expenses and other current liabilities	\$	37 317	\$ 182 233
Redeemable convertible preferred stock issued in Warp Drive acquisition		311	68,144
Extinguishment of redeemable convertible preferred stock liability			2,314
Unpaid consideration for Warp Drive acquisition included within accrued expenses and other current liabilities			102
Conversion of convertible note payable into Series B redeemable convertible preferred stock			2,010

# Revolution Medicines, Inc. Notes to the consolidated financial statements

#### 1. Company and liquidity

#### Description of the business

Revolution Medicines, Inc. (the Company) is a clinical-stage precision oncology company focused on developing novel targeted therapies to inhibit targets primarily within the RAS and mTOR signaling pathways. The Company was founded in October 2014 and is headquartered in Redwood City, California.

#### Liquidity

The Company has incurred net operating losses in each year since inception. The Company's net losses were \$31.1 million and \$41.8 million during the years ended December 31, 2017 and 2018, respectively. As of December 31, 2018, the Company had an accumulated deficit of \$109.7 million. Management believes that its cash and cash equivalents are sufficient to continue operating activities for at least 12 months following the issuance date of these consolidated financial statements. To date, the Company has been able to fund its operations through the issuance and sale of redeemable convertible preferred stock in addition to proceeds received under the Company's collaboration agreement with Sanofi. Future capital requirements will depend on many factors, including the timing and extent of spending on research and development and payments the Company may receive under the Sanofi collaboration agreement or future collaboration agreements, if any. There can be no assurance that, in the event the Company requires additional financing, such financing will be available at terms acceptable to the Company if at all. Failure to generate sufficient cash flows from operations, raise additional capital, and reduce discretionary spending should additional capital not become available could have a material adverse effect on the Company's ability to achieve its intended business objectives.

#### 2. Summary of significant accounting policies

#### Basis of presentation

The consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States (GAAP). The consolidated financial statements for the year ended December 31, 2018 include the accounts of the Company and its wholly owned subsidiary, Warp Drive Bio, Inc. (Warp Drive). The consolidated financial statements for the year ended December 31, 2017 include only the accounts of the Revolution Medicines, Inc. All intercompany balances and transactions have been eliminated in consolidation. The functional and reporting currency of the Company and its subsidiary is the U.S. dollar.

#### Use of estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, clinical accruals, valuation of in-process research and development and developed technologies, valuation of the redeemable convertible preferred stock liability, income taxes, useful lives of property and equipment and intangible assets, impairment of goodwill, and stock-based compensation. Actual results could materially differ from those estimates.

#### Unaudited pro forma financial information

The unaudited pro forma information as of December 31, 2018 has been prepared to give effect to the automatic conversion of all of the outstanding redeemable convertible preferred stock of the Company on a one-to-one basis into 144,016,937 shares of common stock, which will occur upon the closing of an initial public offering (IPO) of common stock resulting in at least \$50 million in gross proceeds at a minimum price of \$2.06 per share of common stock, subject to adjustment for stock dividends, stock splits, combinations or other similar recapitalizations (a Qualified IPO). The unaudited pro forma information does not assume any proceeds from an IPO.

The unaudited pro forma basic and diluted net loss per share for the year ended December 31, 2018 has been computed to give effect to (1) an adjustment to the denominator in the pro forma basic and diluted net loss per share calculation for the automatic conversion of the redeemable convertible preferred stock into shares of common stock, which will occur upon the closing of a Qualified IPO, as of the beginning of the period or the date of issuance, if later, (2) an adjustment to the numerator in the pro forma basic and diluted net loss per share calculation to remove the redeemable cumulative but undeclared convertible preferred stock dividends and (3) an adjustment to the numerator in the pro forma basic and diluted net loss per share calculation to remove losses from the remeasurement of the redeemable convertible preferred stock liability.

#### Cash and cash equivalents

The Company considers all highly liquid investments purchased with original maturities of three months or less at the date of purchase to be cash equivalents. As of December 31, 2017 and 2018, cash equivalents consist of amounts invested in money market funds.

#### Restricted cash

As of December 31, 2018, the Company had \$0.2 million of noncurrent restricted cash related to a Company issued letter of credit in connection with a lease. The entire amount is held in a separate bank account to support a letter of credit agreement for the lease. No restricted cash was outstanding as of December 31, 2017.

#### Concentration of credit risk and other risks and uncertainties

Financial instruments that potentially subject the Company to concentration of credit risk consist of cash and cash equivalents. The Company's cash is held by one financial institution in the United States, which management believes to be of high credit quality. The Company's money market funds are invested in highly rated funds. Deposits at this financial institution may at times exceed federally insured limits. The Company has not experienced any losses on its deposits of cash and cash equivalents.

The Company is subject to credit risk as its receivable and collaboration revenue, related party are entirely related to its collaboration agreement with Sanofi. See Note 6 "Sanofi collaboration agreement."

#### Fair value measurement

The carrying amounts of the Company's certain financial instruments, including cash equivalents, accounts payable and accrued expenses and other current liabilities approximate fair value due to their relatively short maturities and market interest rates, if applicable.

Assets and liabilities recorded at fair value on a recurring basis in the consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair

value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active; and

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

#### Property and equipment, net

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation is computed on a straight-line basis over the estimated useful lives of the related assets, which is generally three to five years. Leasehold improvements are amortized using the straight-line method over the shorter of the assets' estimated useful lives or the remaining term of the lease. Maintenance and repairs are charged to operations as incurred. Upon sale or retirement of assets, the cost and related accumulated depreciation are removed from the consolidated balance sheet and the resulting gain or loss is reflected in the consolidated statement of operations and comprehensive loss.

Useful lives of property and equipment are as follows:

Property and equipment	Estimated useful life
Laboratory equipment	4-5 years
Leasehold improvements	Lesser of estimated useful life or remaining lease term
Computer equipment and software	3 years
Furniture and fixtures	5 years

#### Impairment of long-lived assets

Long-lived assets are reviewed for indications of possible impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. Recoverability is measured by comparison of the carrying amounts of the asset group to the future undiscounted cash flows attributable to these assets. An impairment loss is recognized to the extent an asset group is not recoverable, and the carrying amount exceeds the projected discounted future cash flows arising from these assets. There were no impairments of long-lived assets for any of the periods presented.

#### Acquired intangible assets

Indefinite-lived intangible assets represent the estimated fair value assigned to in-process research and development (IPR&D) acquired in a business combination. The Company reviews indefinite-lived intangible assets for impairment at least annually or more frequently if events or changes in circumstances indicate that the carrying value of the assets might not be recoverable. If the carrying value of an indefinite-lived intangible

asset exceeds its fair value, then it is written down to its adjusted fair value. As of December 31, 2018, there have been no such impairments. For IPR&D, if a product candidate derived from the indefinite-lived intangible asset is developed and commercialized, the useful life will be determined, and the carrying value will be amortized prospectively over that estimated useful life. Alternatively, if a product candidate is abandoned, the carrying value of the intangible asset will be charged to research and development expenses in the consolidated statements of operations and comprehensive loss.

Finite-lived intangible assets acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition date. Amortization is computed using the straight-line method over the estimated useful lives of the respective finite-lived intangible assets. Intangible assets are reviewed for impairment at least annually or more frequently if indicators of potential impairment exist.

#### Goodwill

Goodwill represents the excess of the purchase price over the estimated fair value of the net tangible and intangible assets acquired in a business combination. The Company reviews goodwill for impairment at least annually or more frequently if events or changes in circumstances indicate that the carrying value of goodwill may not be recoverable. Goodwill is tested for impairment at the reporting unit level by first assessing the qualitative factors to determine whether it is more likely than not that the fair value of the Company's single reporting unit is less than its carrying amount. Qualitative indicators assessed include consideration of macroeconomic, industry and market conditions, the Company's overall financial performance and personnel or strategy changes. Based on the qualitative assessment, if it is determined that it is more likely than not that its fair value is less than its carrying amount, the fair value of the Company's single reporting unit is compared to its carrying value. Any excess of the goodwill carrying amount over the fair value is recognized as an impairment loss, and the carrying value of goodwill is written down to fair value. As of December 31, 2018, no goodwill impairment has been identified.

#### Redeemable convertible preferred stock

The Company records all shares of redeemable convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. The redeemable convertible preferred stock is recorded outside of permanent equity because while it is not mandatorily redeemable, in the event of certain events considered not solely within the Company's control, such as a merger, acquisition or sale of all or substantially all of the Company's assets (each, a "deemed liquidation event"), the redeemable convertible preferred stock will become redeemable at the option of the holders of at least a majority of the then outstanding such shares. The Company has not adjusted the carrying values of the redeemable convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when a deemed liquidation event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of redeemable convertible preferred stock. Subsequent adjustments to the carrying values to the liquidation preferences will be made only when it becomes probable that such a deemed liquidation event will occur.

#### Redeemable convertible preferred stock liability

The Company's March 2018 issuance and sale of Series B redeemable convertible preferred stock was tranched into two funding dates, a first closing in March 2018, and a second closing to purchase additional shares in June 2018. The Company classified the obligation for the future purchase of additional shares under the second closing as a liability on the Company's consolidated balance sheets as the obligation met the definition of a freestanding financial instrument. This redeemable convertible preferred stock tranche liability was initially

recorded at a fair value of \$0.2 million upon the date of issuance and was subsequently remeasured to fair value at each reporting date using Level 3 fair value inputs. Changes in the fair value of the redeemable convertible preferred stock tranche obligation of \$2.1 million were recognized as a component of other income (expense), net in the consolidated statements of operations and comprehensive loss until the tranche obligation was fulfilled and extinguished upon the second closing in June 2018.

#### Revenue recognition

Effective January 1, 2018, the Company adopted Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* (ASC 606) using the full retrospective transition method. The Company did not have any effective contracts within the scope of this guidance prior to January 1, 2018. Accordingly, the Company did not elect to use any of the practical expedients permitted related to adoption, and the adoption of ASC 606 had no impact on the Company's financial position, results of operations or liquidity. Under ASC 606, the Company recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that the Company determines are within the scope of ASC 606, the Company performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies a performance obligation. At contract inception, once the contract is determined to be within the scope of ASC 606, the Company assesses the goods or services promised within each contract and determines those that are performance obligations and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

The Company enters into collaboration agreements under which it may obtain upfront license fees, research and development funding, and development, regulatory and commercial milestone payments and royalty payments. The Company's performance obligations under these arrangements may include licenses of intellectual property, sales and distribution rights, research and development services, delivery of manufactured product and/or participation on joint steering committees.

Licenses of intellectual property: If the license to the Company's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenue from upfront license fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. For licenses that are bundled with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring proportional performance for purposes of recognizing revenue from non-refundable, upfront fees. The Company evaluates the measure of proportional performance each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Research, development and regulatory milestone payments: At the inception of each arrangement that includes research, development, or regulatory milestone payments, the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price. The Company uses the most likely amount method for research, development and regulatory milestone payments. Under the most likely amount method, an entity considers the single most likely amount in a range of possible consideration amounts. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price.

Sales-based milestones and royalties: For arrangements that include sales-based milestone or royalty payments based on the level of sales, and in which the license is deemed to be the predominant item to which the sales-based milestone or royalties relate to, the Company recognizes revenue in the period in which the sales-based milestone is achieved and in the period in which the sales associated with the royalty occur. To date, the Company has not recognized any or sales-based milestone or royalty revenue resulting from its collaboration arrangements.

Deferred revenue represents amounts received by the Company for which the related revenues have not been recognized because one or more of the revenue recognition criteria have not been met. The current portion of deferred revenue represents the amount to be recognized within one year from the balance sheet date based on the estimated performance period of the underlying performance obligation. The noncurrent portion of deferred revenue represents amounts to be recognized after one year through the end of the performance period of the performance obligation.

#### Research and development expenditures

Research and development expenses consist of costs incurred for the Company's own and for collaborative research and development activities. Research and development costs are expensed as incurred. Research and development costs consist of salaries and benefits, including associated stock-based compensation, and laboratory supplies and facility costs, as well as fees paid to other entities that conduct certain research and development activities on the Company's behalf. The Company estimates preclinical study and clinical trial expenses based on the services performed pursuant to contracts with research institutions and contract research organizations, or CROs, and clinical manufacturing organizations, or CMOs, that conduct and manage preclinical studies and clinical trials on the Company's behalf based on actual time and expenses incurred by them. Further, the Company accrues expenses related to clinical trials based on the level of patient activity according to the related agreement. The Company monitors patient enrollment levels and related activity to the extent reasonably possible and adjusts estimates accordingly.

#### Stock-based compensation

The Company measures its stock-based awards granted to employees and directors based on the estimated fair values of the awards and recognizes the compensation over the requisite service period. The Company uses the Black-Scholes option-pricing model to estimate the fair value of its stock-based awards. Stock-based compensation is recognized on a straight-line basis over the vesting period. Stock options granted to non-employees are recorded at their fair value on the measurement date and are subject to periodic adjustments as such options vest and at the end of each reporting period, and the resulting change in fair value, if any, is recognized in the Company's consolidated statements of operations and comprehensive loss during the period the related services are rendered.

#### Income taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Management makes an assessment of the likelihood that the resulting deferred tax assets will be realized. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. Due to the Company's historical operating performance and the recorded cumulative net losses in prior fiscal periods, the net deferred tax assets have been fully offset by a valuation allowance.

The Company recognizes uncertain income tax positions at the largest amount that is more likely than not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. Changes in recognition or measurement are reflected in the period in which judgment occurs. The Company's policy is to recognize interest and penalties related to the underpayment of income taxes as a component of interest and other expense.

#### Comprehensive loss

For the years ended December 31, 2017 and 2018, there are no components of other comprehensive loss for the Company. Thus, comprehensive loss is the same as the net loss for the periods presented.

#### Net loss per share attributable to common stockholders

Basic net loss per share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, without consideration for potentially dilutive securities. Diluted net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common stock and potentially dilutive securities outstanding for the period. For purposes of the diluted net loss per share calculation, redeemable convertible preferred stock, stock options, common stock subject to repurchase related to unvested restricted stock awards and early exercise of stock options are considered to be potentially dilutive securities. Basic and diluted net loss attributable to common stockholders per share is presented in conformity with the two-class method required for participating securities as the redeemable convertible preferred stock is considered a participating security because it participates in dividends with common stock. The Company also considers the shares issued upon the early exercise of stock options subject to repurchase to be participating securities because holders of such shares have non-forfeitable dividend rights in the event a dividend is paid on common stock. The holders of all series of redeemable convertible preferred stock and the holders of early exercised shares subject to repurchase do not have a contractual obligation to share in the Company's losses. As such, the net loss was attributed entirely to common stockholders. Because the Company has reported a net loss for all periods presented, diluted net loss per share is the same as basic net loss per share for those periods.

#### Segment reporting

The Company has one operating and reportable segment. The Company's chief operating decision maker, its Chief Executive Officer, manages the Company's operations on a consolidated basis for the purposes of allocating resources and evaluating financial performance. All of the Company's long-lived assets are located in the United States.

#### Retirement plans

The Company maintains a 401(k) retirement plan for its employees. The Company is responsible for administrative costs of the 401(k) plan. The Company may, at its discretion, make matching or profit-sharing contributions to the 401(k) plan. For the years ended December 31, 2017 and 2018, the Company made no matching contributions under the plan.

#### Recently issued and adopted accounting pronouncements

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606). Subsequently, the FASB also issued ASU No. 2015-14, Revenue from Contracts with

Customers (Topic 606), which adjusted the effective date of ASU No. 2014-09; ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net), which amends the principal-versus-agent implementation guidance and illustrations in ASU No. 2014-09; ASU No. 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing, which clarifies identifying performance obligation and licensing implementation guidance and illustrations in ASU No. 2014-09; and ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients, which addresses implementation issues and is intended to reduce the cost and complexity of applying the new revenue standard in ASU No. 2014-09 (collectively, the Revenue ASUs).

The Revenue ASUs provide an accounting standard for a single comprehensive model for use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented (the full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the modified retrospective method).

On January 1, 2018, the Company early adopted ASC 606 using the full retrospective method. The Company did not have any arrangements with customers prior to 2018 and, accordingly, there was no impact from the adoption of ASC 606 on its consolidated financial statements as of and for the year ended December 31, 2017.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities (ASU 2016-01). ASU 2016-01 enhances the reporting model for financial instruments, which includes amendments to address aspects of recognition, measurement, presentation and disclosure of financial instruments. In February 2018, the FASB issued ASU 2018-03, Technical Corrections and Improvements to Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities (ASC 2018-03). The adoption of this guidance during the year ended December 31, 2018 did not have an impact on the Company's consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, *Stock Compensation—Improvements to Employee Share-Based Payment Accounting* (ASU 2016-09). ASU 2016-09 was issued to simplify accounting guidance by identifying, evaluating, and improving areas for which cost and complexity can be reduced while maintaining or improving the usefulness of the information provided to users of financial statements. The areas affected by ASU 2016-09 include accounting for income taxes, classification of excess tax benefits on the statement of cash flows, minimum statutory tax withholding requirements, and classification of employee taxes paid on the statement of cash flows when an employer withholds shares for tax-withholding purposes. In addition, under this guidance, an entity can make an accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures when they occur. The adoption of this guidance during the year ended December 31, 2017 did not have a material impact on the Company's consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-18, Restricted Cash, Statement of Cash Flows (Topic 230): Restricted Cash (ASU 2016-18). ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The adoption of this guidance during the year ended December 31, 2018 did not have a material impact on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* (ASU 2017-04). ASU 2017-04 simplifies the measurement of goodwill by eliminating step two of the two-step impairment test. Step two measures a goodwill impairment loss by

comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. The new guidance requires an entity to compare the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. Additionally, an entity should consider income tax effects from any tax-deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. The early adoption of this guidance during the year ended December 31, 2018 did not have an impact on the Company's consolidated financial statements.

#### Recent accounting pronouncements not yet adopted

In February 2016, the FASB issued ASU No. 2016-02, Leases (ASU 2016-02). ASU 2016-02 provides accounting guidance for both lessee and lessor accounting models. The principle of ASU 2016-02 is that a lessee should recognize the assets and liabilities that arise from leases. Lessees will need to recognize a right-of-use asset and a lease liability for virtually all of their leases (other than leases that meet the definition of a short-term lease). The liability will be equal to the present value of lease payments. The asset will be based on the liability. For income statement purposes, ASU 2016-02 requires leases to be classified as either operating or finance. Operating leases will result in straight-line expense while finance leases will result in a front-loaded expense pattern. ASU 2016-02 is applicable to the Company for the fiscal year beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. In July 2018, the FASB issued supplemental adoption guidance and clarification to ASC 842 within ASU 2018-10, Codification Improvements to Topic 842, Leases, ASU 2018-11, Leases (Topic 842): Targeted Improvements and ASU 2019-01, Leases (Topic 842): Codification Improvements. ASU 2018-11 provides another transition method in addition to the existing modified retrospective transition method by allowing entities to initially apply the new leasing standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. The Company plans to adopt these ASUs on January 1, 2020. While the Company continues to review its current accounting policies and practices to identify potential differences that would result from applying the new guidance, the Company currently believes the most significant changes will be related to the recognition of new right-of-use assets and lease liabilities in the Company's consolidated balance sheet for operating leases. The Company expects to elect transitional practical expedients such that the Company will not need to reassess whether contracts are leases and will retain lease classification and initial direct costs for leases existing prior to the adoption of the new lease standard.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU 2016-13), which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model. It also eliminates the concept of other-than-temporary impairment and requires credit losses related to available-for-sale debt securities to be recorded through an allowance for credit losses rather than as a reduction in the amortized cost basis of the securities. These changes will result in earlier recognition of credit losses. In November 2018, the FASB issued ASU No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments—Credit Losses* (ASU 2018-19) which narrowed the scope and changed the effective date for non-public entities for ASU 2016-13. The FASB subsequently issued supplemental guidance within ASU No. 2019-05, *Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief* (ASU 2019-05). ASU 2019-05 provides an option to irrevocably elect the fair value option for certain financial assets previously measured at amortized cost basis. ASU 2016-13 is applicable to the Company for the fiscal year beginning after December 15, 2021. Early adoption is permitted. The Company is currently evaluating the impact the adoption of these ASUs will have on its consolidated financial statements and related disclosures.

In June 2018, the FASB issued ASU No. 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting (ASU 2018-07). ASU 2018-07 simplifies the accounting for

Total

share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. ASU 2018-07 is applicable to the Company for the fiscal year beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement Disclosure Framework (ASU 2018-13). ASU 2018-13 is part of a broader disclosure framework project by the FASB to improve the effectiveness of disclosures by more clearly communicating the information to the user. ASU 2018-13 is applicable to the Company for the fiscal year beginning after December 15, 2019. Early adoption is permitted. The Company is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statement disclosures.

In August 2018, the FASB issued ASU No. 2018-15, Intangibles—Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (ASU 2018-15). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a cloud computing arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use-software. This ASU is effective for the Company for the fiscal year beginning after December 31, 2020, and interim periods within fiscal years beginning after December 31, 2021. The Company is currently evaluating the impact of this ASU on the Company's consolidated financial statements.

#### 3. Fair value measurements

The following table presents information about the Company's financial assets that are measured at fair value and indicates the fair value hierarchy of the valuation:

		December 31, 2017				
	Total	Level 1	Level 2	Level 3		
		(in thou	sands)			
Money market funds(1)	\$9,054	\$ 9,054	\$ —	\$ —		
Total	\$9,054	\$ 9,054	\$ —	\$ —		
		Decembe	er 31, 2018			
	Total	Level 1	Level 2	Level 3		
		(in tho	usands)			
Money market funds(1)	\$69,353	\$69,353	\$ —	\$ —		
Contingently returnable consideration asset(2)	310	_	_	310		

<sup>(1)</sup> Included in cash and cash equivalents on the consolidated balance sheets.

Money market funds are measured at fair value on a recurring basis using quoted prices. The contingently returnable consideration asset relates to the fair value of the Warp Drive acquisition holdback, which was determined using an income-based approach. The key assumptions in determining the fair value are the discount rate and the probability assigned to the potential holdback. There were no transfers between Levels 1, 2 or 3 for any of the periods presented. There were no changes in the fair value of the contingently returnable consideration asset between the date of the Warp Drive acquisition and December 31, 2018.

\$69,663

\$69,353

310

<sup>(2)</sup> Included in prepaid expenses and other current assets on the consolidated balance sheets.

#### 4. Consolidated balance sheet components

#### Intangible assets, net

Intangible assets, net consists of the following as of December 31, 2018:

	Gro	oss value		mulated rtization	bo	Net ok value	Weighted- average remaining useful life
			(in the	ousands)			(in years)
In-process research and development—RAS programs	\$	55,800	\$		\$	55,800	n/a
Developed technology—tri-complex platform		7,480		(198)		7,282	6.8
Total	\$	63,280	\$	(198)	\$	63,082	

The Company had no intangible assets as of December 31, 2017. See Note 7, "Acquisition of Warp Drive," for a description of the assets acquired as part of the Warp Drive acquisition. Amortization expense for the year ended December 31, 2018 was \$0.2 million. There was no amortization expense for the year ended December 31, 2017.

The expected future amortization related to intangible assets as of December 31, 2018 is as follows:

Year ending December 31,	Amount	
	(in t	thousands)
2019	\$	1,069
2020		1,069
2021		1,069
2022		1,069
2023		1,069
Thereafter		1,937
Total	\$	7,282

#### Goodwill

Goodwill consists of the following:

	Year e	Year ended December 31,			
	2017		2018		
		in thousands			
Beginning balance	\$ —	\$	_		
Goodwill acquired (Note 7)	<del>-</del>		14,608		
Ending balance	<del></del>	\$	14,608		

#### Property and equipment, net

Property and equipment, net consists of the following:

	Decen	December 31,	
	2017	2018	
	(in tho	(in thousands)	
Laboratory equipment	\$ 3,587	\$ 6,181	
Leasehold improvements	3,217	3,304	
Computer equipment and software	617	978	
Furniture and fixtures	16	32	
	7,437	10,495	
Less: accumulated depreciation and amortization	_ (2,184)	(3,623)	
Property and equipment, net	\$ 5,253	\$ 6,872	

During the year ended December 31, 2018, the Company acquired \$2.2 million of property and equipment as part of its acquisition of Warp Drive.

Depreciation and amortization expense for property and equipment amounted to \$1.2 million and \$1.6 million for the years ended December 31, 2017 and 2018, respectively.

#### Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consist of the following:

	Decem	December 31,	
	2017	2018	
	(in thou	(in thousands)	
Accrued compensation	\$1,468	\$4,861	
Accrued research and development	1,525	2,016	
Deferred rent, current	496	552	
Accrued professional services	173	264	
Capital lease, current	_	147	
Other	583	646	
Total accrued expenses and other current liabilities	\$4,245	\$8,486	

#### 5. Commitments and contingencies

#### Operating leases

In January 2015, as amended in September 2016, the Company entered into a facility lease for office and laboratory space located in Redwood City, California (Redwood City Lease) which expires in April 2023. The landlord provided the Company with tenant improvement allowances of \$3.4 million. The Company has assessed the tenant improvement allowance to be a lease incentive and has capitalized the full amount to property and equipment and recognized a corresponding lease financing obligation included in deferred rent on the consolidated balance sheets. The lease financing obligation is amortized as an offset to rent expense over the lease term in the consolidated statements of operations and comprehensive loss.

In conjunction with the lease agreement, the Company paid a security deposit of \$0.3 million which is included in other noncurrent assets on the consolidated balance sheets as of December 31, 2017 and 2018.

In July 2015, as amended in March 2016 and September 2016, the Company subleased a portion of the Redwood City Lease to Pliant Therapeutics, Inc., a related party, which expired in June 2018. Sublease income of \$0.9 million and \$0.5 million for the years ended December 31, 2017 and 2018, respectively, was recorded as an offset to rent expense in the consolidated statements of operations and comprehensive loss.

As part of the Warp Drive acquisition in October 2018, the Company assumed a facility lease for office and laboratory space located in Cambridge, Massachusetts (Cambridge Lease) which expires in February 2023. In March 2019, the Company fully subleased the Cambridge Lease to Casma Therapeutics, Inc. (Casma), a related party, on financial terms substantially the same as the original lease. The sublease term with Casma is through the remainder of the Cambridge Lease term. The sublease by Casma and related sublease payments by Casma to the Company are fully guaranteed by Third Rock Ventures, LLC, a related party. In conjunction with the Cambridge Lease, the Company issued a letter of credit for \$0.2 million, which is included in restricted cash on the consolidated balance sheet as of December 31, 2018.

Rent expense for the years ended December 31, 2017 and 2018 was \$0.7 million and \$1.5 million, respectively, net of sublease income and tenant improvement allowance credits. The terms of the facility leases provide for rental payments on a graduated scale; however, rent expense is recognized on a straight-line basis over the lease term. At December 31, 2017 and 2018, \$3.3 million and \$2.8 million was included as deferred rent, respectively, which includes the deferred tenant improvement allowance and straight-line rent. The current portion of deferred rent is included in accrued expenses and other current liabilities and the noncurrent portion of deferred rent is included in deferred rent, noncurrent on the consolidated balance sheets.

As of December 31, 2018, future minimum payments under the Company's operating and capital leases are as follows:

	(in t	(in thousands)	
2019	\$	3,714	
2020		3,820	
2021		3,786	
2022		3,886	
2023		1,003	
Total future minimum lease payments	\$	16,209	

Included in the amounts above are \$0.3 million of capital lease obligations.

The amounts reflected in the table above incorporate the Company's lease payments for the Cambridge Lease, but do not reflect any offset for the sublease payments the Company will receive from Casma.

#### Legal matters

From time to time, the Company may be involved in litigation related to claims that arise in the ordinary course of its business activities. The Company accrues for these matters when it is probable that future expenditures will be made and these expenditures can be reasonably estimated. As of December 31, 2017 and December 31, 2018, the Company does not believe that any such matters, individually or in the aggregate, will have a material adverse effect on the Company's financial position, results of operations or cash flows.

#### Indemnification

The Company enters into standard indemnification arrangements in the ordinary course of business. Pursuant to these arrangements, the Company indemnifies, holds harmless and agrees to reimburse the indemnified

parties for losses suffered or incurred by the indemnified party, in connection with any trade secret, copyright, patent or other intellectual property infringement claim by any third party with respect to its technology. The term of these indemnification agreements is generally perpetual any time after the execution of the agreement. The maximum potential amount of future payments the Company could be required to make under these arrangements is not determinable. The Company has never incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, the Company believes the fair value of these agreements is minimal.

#### 6. Sanofi collaboration agreement

In June 2018, the Company entered into a collaborative research, development and commercialization agreement with Aventis, Inc. (an affiliate of Sanofi), or the Sanofi Agreement, to research and develop SHP2 inhibitors, including RMC-4630 for any indications. Pursuant to the Sanofi Agreement, the Company granted Sanofi a worldwide, exclusive, sublicensable (subject to the Company's consent in certain circumstances) license under certain of the Company's patents and know-how to research, develop, manufacture, use, sell, offer for sale, import and otherwise commercialize SHP2 inhibitors, including RMC-4630, for any and all uses, subject to the Company's exercise of rights and performance obligations under the Sanofi Agreement.

In October 2018, the Company acquired Warp Drive in exchange for the Company's Series B redeemable convertible preferred stock and cash. Sanofi was a stockholder of Warp Drive and received the Company's Series B redeemable convertible preferred stock during the transaction and accordingly became an investor and related party of the Company.

Under the Sanofi Agreement, the Company received a non-refundable, upfront cash payment of \$50 million in July 2018 and could also receive up to \$520 million in development and regulatory milestone payments, including up to \$235 million upon the achievement of specified development milestones and up to \$285 million upon the achievement of certain marketing approval milestones. Sanofi also agreed to reimburse the Company for 80% of all internal and external research costs and expenses incurred under the research plan for 2019 and 2020, and for all other internal and external costs and expenses incurred to perform activities under the research and development plans for the SHP2 program. The Company is responsible for 20% of all internal and external research costs incurred under the research plan for 2019 and 2020. In the United States, the Company will share equally with Sanofi the profits and losses applicable to commercialization of SHP2 inhibitor products, pursuant to a profit/loss share agreement that the parties will negotiate based on key terms agreed in the Sanofi Agreement. On a product-by-product basis, Sanofi will also be required to pay the Company tiered royalties on annual net sales of each product outside the United States ranging from high single digit to mid-teen percentages.

The Company has primary responsibility for early clinical development of RMC-4630 pursuant to an initial development plan and also has primary responsibility for the manufacture of SHP2 inhibitors for Phase 1 and Phase 2 non-registrational clinical trials, while Sanofi is responsible for manufacturing SHP2 inhibitors for all other clinical trials and commercial supply.

Unless terminated earlier, the Sanofi Agreement will continue in effect until the later of the expiration of all of Sanofi's milestone and royalty payment obligations and the expiration of the profit/loss share agreement. Sanofi may terminate the Sanofi Agreement in its entirety or on a country-by-country or product-by-product basis for any reason or for significant safety concerns, upon prior notice to the Company. Sanofi may terminate the Sanofi Agreement in its entirety upon a change of control in the Company, with prior notice. Either party may terminate the Sanofi Agreement if an undisputed material breach by the other party is not cured within a defined period of time, or immediately upon notice for insolvency-related events of the other party. The Company may terminate

the Sanofi Agreement after a certain number of years if Sanofi develops a competing program without commencing a registrational clinical trial for a SHP2 inhibitor product candidate, and subject to certain other conditions. The Company may also terminate the Sanofi Agreement at any time, if Sanofi ceases certain critical activities for SHP2 inhibitor product candidates for more than a specified period of time, provided that such cessations of critical activity were not a result of certain specified factors, and subject to certain other conditions. Upon any termination of the Sanofi Agreement with respect to any product or country, all licenses to Sanofi with respect to such product or country shall automatically terminate and all rights generally revert back to the Company.

The Company identified the following promises in the agreement (1) the license related to SHP2 inhibitors, (2) the performance of research and development services for Phase 1 clinical studies and Phase 2 clinical trials that are non-registrational clinical trials and (3) the performance of manufacturing services for the non-registrational clinical trials. The Company determined that the license is not distinct from the services within the context of the agreement because the research, development and manufacturing significantly increase the utility of the intellectual property. The intellectual property (IP) related to SHP2 inhibitors, which is proprietary to the Company, is the foundation for the research and development activities. The manufacturing services are a necessary and integral part of the research and development services as they could only be conducted utilizing the outcomes of these services. Given the research and development services under the Sanofi Agreement are expected to involve significant further development of the initial IP, the Company has concluded that the research, development and manufacturing services are not distinct from the license, and thus the license, research and development services and manufacturing services are combined into a single performance obligation.

For revenue recognition purposes, the Company determined that the duration of the contract begins on the effective date of the Sanofi Agreement in July 2018 and ends upon completion of the non-registrational clinical trials. The contract duration is defined as the period in which parties to the contract have present enforceable rights and obligations. The Company analyzed the impact of Sanofi terminating the agreement prior to the completion of these trials and determined that there were significant economic costs to Sanofi for doing so.

The Company determined that the transaction price of the Sanofi Agreement was \$197.2 million as of December 31, 2018. In order to determine the transaction price, the Company evaluated all the payments to be received during the duration of the contract. The Company determined that the \$50.0 million upfront payment and \$147.2 million of estimated variable consideration for expense reimbursements from Sanofi for agreed upon research and development services as of December 31, 2018 constituted consideration to be included in the transaction price, which is to be allocated to the combined performance obligation. Development and regulatory milestones under the Sanofi Agreement were considered but not included in the transaction price, as it is probable that a significant revenue reversal could occur if they were included. The Company will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

The license, research, development and manufacturing services are combined as one performance obligation that will be performed over the duration of the contract, which is from the effective date of the Sanofi Agreement through to the completion of studies. The Company concluded that it will utilize a cost-based input method to measure proportional performance and to calculate the corresponding amount of revenue to recognize. In applying the cost-based input method of revenue recognition, the Company uses actual costs incurred relative to estimated costs to fulfill the combined performance obligation. These costs consist primarily of internal full-time equivalent efforts and third-party costs. Revenue is recognized based on actual costs incurred as a percentage of total estimated costs as the Company completes its performance obligations. The cumulative effect of revisions to estimated costs to complete the Company's performance obligations will be recorded in the period in which changes are identified and amounts can be reasonably estimated.

During the year ended December 31, 2018, the Company recognized \$19.4 million of collaboration revenue associated with this agreement.

As of December 31, 2018, \$16.8 million of deferred revenue, related party is classified as current and \$28.4 million is classified as noncurrent.

# 7. Acquisition of Warp Drive

In October 2018, the Company acquired all outstanding shares of Warp Drive in exchange for issuing 33,079,554 shares of the Company's Series B redeemable convertible preferred stock and \$0.9 million in other consideration, for total consideration of \$69.0 million. Warp Drive was a privately held biotechnology company based in Cambridge, Massachusetts.

Warp Drive's RAS programs include compounds targeting various cancer indications, while its tri-complex platform is targeted at identifying presenter proteins for binding with small molecules and a target. Additionally, Warp Drive had a genome mining platform that is subject to a collaboration agreement with Hoffman-La Roche Ltd. (Roche) involving research in the area of neomorph antibiotics.

Pursuant to ASC Topic 805, *Business Combinations*, the transaction was determined to be a business combination and was accounted for using the acquisition method of accounting. The following table presents a summary of the purchase price consideration for the acquisition:

	(in t	(in thousands)	
Series B redeemable convertible preferred stock	\$	68,144	
Cash		1,172	
Contingently returnable consideration asset		(310)	
Total consideration	\$	69,006	

The fair value of \$2.06 per share of Series B redeemable convertible preferred stock was determined using a discounted cash flow model to estimate the value of the Company's equity, and subsequently allocated to the Series B redeemable convertible preferred stock using an option pricing method.

The shares and cash issued as part of the transaction include 2,407,619 shares and less than \$0.1 million of cash subject to a holdback based on certain events associated with Warp Drive's agreement with Roche. The shares and cash subject to the holdback were issued on closing of the acquisition, but would be required to be returned to the Company if the holdback events did not occur. On the acquisition date, the Company determined the fair value of the holdback provision was \$0.3 million and recorded it as a contingently returnable consideration asset on its consolidated balance sheet. The shares subject to the holdback retained their voting rights. In March 2019, the events subject to the holdback occurred and the issued shares and cash were no longer subject to the holdback provision. See Note 3, "Fair value measurements," for a description of the determination of the fair value of the contingently returnable consideration asset.

During the year ended December 31, 2018, the Company incurred \$0.4 million of acquisition-related costs as a result of the Warp Drive acquisition, which were recorded as general and administrative expenses in the consolidated statements of operations and comprehensive loss. The Company also paid \$0.6 million in transaction costs incurred by Warp Drive related to Warp Drive's advisors, which was included as part of the purchase price consideration.

The following table summarizes the fair values of the assets acquired and liabilities assumed at the acquisition date (in thousands):

	(in th	ousands)
Assets acquired:		
Cash and other current assets	\$	1,594
Property and equipment		2,151
In-process research and development—RAS programs		55,800
Developed technology—tri-complex platform		7,480
Developed technology—genome mining platform		6,100
Total assets acquired		73,125
Liabilities assumed:		
Accounts payable and other accrued liabilities		3,790
Convertible note payable, related party		2,000
Deferred revenue		745
Deferred tax liability		12,192
Total liabilities assumed		18,727
Goodwill		14,608
Total	\$	69,006

The valuations of the IPR&D—RAS programs and developed technology—genome mining platform were determined using the income approach, which discounts expected future cash flows to present value. The discount rates used were between 13% and 14%. The projected cash flows were based on key assumptions such as: estimates of revenues and operating profits related to each program or platform considering its stage of development on the acquisition date; the time and resources needed to complete the development and approval of product candidates; the life of the potential commercialized products and associated risks, including the inherent difficulties and uncertainties in developing a product candidate such as obtaining marketing approval from the FDA and other regulatory agencies; and risks related to the viability of and potential alternative treatments in any future target markets.

Intangible assets associated with acquired IPR&D relate to the RAS programs. Management determined that the estimated acquisition-date fair value of the intangible asset related to IPR&D was \$55.8 million, which was comprised of \$44.1 million related to the KRAS<sup>G12C</sup> program and \$11.7 million related to the KRAS<sup>G12D</sup> program. The KRAS<sup>G12C</sup> and the KRAS<sup>G12D</sup> programs are each focused on developing inhibitors which target specific mutations of KRAS(ON) proteins. The acquired IPR&D is considered to be an indefinite-lived asset until the completion or abandonment of the research and development efforts. The acquired IPR&D will not be amortized until completion of the related products, which is determined by when the underlying programs reach technological feasibility and commence commercial production. Upon completion, the acquired IPR&D will be amortized over its useful life.

The valuation of the developed technology—tri-complex platform was based on a replacement cost approach as the Company's management intends to leverage the platform internally, but does not have the ability to assign a specific income stream to the asset. The tri-complex platform was accounted for as developed technology and is being amortized over 7 years. Amortization expense for the year ended December 31, 2018 was \$0.2 million.

The genome mining platform, including the associated Roche collaboration agreement, was accounted for as held for sale developed technology and was divested in January 2019.

The Company assumed a convertible promissory note (Convertible Note) as part of the Company's acquisition of Warp Drive. See Note 13, "Related party relationships."

Deferred revenue consists of the remaining estimated cost obligations, including mark-up, associated with the collaboration with Roche. The entire amount was recognized as revenue during the year ended December 31, 2018 and included under collaboration revenue, other in the consolidated statements of operations and comprehensive loss.

The Company recorded \$14.6 million in goodwill associated with this acquisition, which relates to the establishment of a deferred tax liability for the non-deductible in-process research and development intangible assets acquired and synergies resulting from the acquisition. Goodwill will not be amortized but will be tested at least annually for impairment. No impairment has been recognized as of December 31, 2018. Goodwill recorded is not deductible for income tax purposes.

Subsequent to the acquisition, the Company recorded \$1.4 million of severance costs during the year ended December 31, 2018 in the consolidated statement of operations and comprehensive loss.

The acquisition is considered a material business combination and accordingly unaudited pro forma information presented below for the year ended December 31, 2018, includes the effects of pro forma adjustments as if the acquisition of Warp Drive occurred on January 1, 2017, the beginning of the comparable prior annual reporting period. The unaudited pro forma results include adjustments related to the following:
(i) amortization expense related to the fair value of identifiable intangible assets acquired, (ii) impact of the genome mining deposition, (iii) alignment of Warp Drive's revenue recognition policy to the Company's adoption method and adoption date of ASC 606, (iv) inclusion of incurred acquisition-related and severance costs as of the earliest period presented, (v) elimination of interest expense and gain related to Warp Drive's convertible note payable, which was converted into Warp Drive common stock immediately prior to the acquisition and subsequently converted into the Company's Series B redeemable convertible preferred stock in connection with the acquisition, and (vi) adjustment of depreciation expense related to the estimated useful lives of property and equipment acquired.

The pro forma financial information presented below is not necessarily indicative of the results of operations that would have been achieved if the acquisition occurred at the beginning of the earliest period presented, nor is it intended to be a projection of future results.

	Year ended D	Year ended December 31,		
	2017	2018		
	(unaudited, i	(unaudited, in thousands)		
Total revenue	\$ 13,318	\$ 20,302		
Net loss	(49,887)	(57,151)		

Revenues associated with Warp Drive included in the Company's consolidated statement of operations and comprehensive loss were \$0.7 million for the period from acquisition date to December 31, 2018. Net loss associated with Warp Drive included in the Company's consolidated statement of operations and comprehensive loss was \$4.2 million for the period from the acquisition date to December 31, 2018.

# 8. Redeemable convertible preferred stock

From December 2014 to May 2017, the Company issued a total of 70,221,732 shares of Series A redeemable convertible preferred stock at a price per share of \$1.00 for proceeds of \$70.1 million, net of issuance costs. In March and June 2018, the Company issued a total of 37,620,613 shares of Series B redeemable convertible preferred stock at a price per share of \$1.50 for proceeds of \$56.2 million, net of issuance costs. In October

2018, the Company issued 33,079,554 shares of Series B redeemable convertible preferred stock in conjunction with acquiring Warp Drive. As part of the Warp Drive acquisition, the Company assumed \$2.0 million in convertible notes payable, which was fully converted into 975,620 shares of Series B redeemable convertible preferred stock in October 2018. In November 2018, the Company issued 2,119,418 shares of Series B redeemable convertible preferred stock at a price per share of \$2.06 for proceeds of \$4.3 million, net of issuance costs.

Redeemable convertible preferred stock consists of the following:

	As of December 31, 2017					
	Shares issued			Aggr		
	Shares	and		carrying		uidation
	authorized	outstanding		value	pr	eference
	(in thousands, except share data)					
Series A	70,221,732	70,221,732	\$	72,248	\$	181,760
	70,221,732	70,221,732	\$	72,248	\$	181,760

	As of December 31, 2018					
		Shares issued			Αg	ggregate
	Shares authorized	and outstanding	Ne	t carrying value	liquidation preference	
	(in thousands, except share data)				Pi	CICICIICC
Series A	70,221,732	70,221,732	\$	72,248	\$	80,641
Series B	76,000,000	73,795,205		132,833		113,492
	146,221,732	144,016,937	\$	205,081	\$	194,133

The net carrying value of Series A redeemable convertible preferred stock as of December 31, 2017 and 2018 includes \$2.2 million of accretion of the redemption value and cumulative dividends on convertible preferred stock prior to January 1, 2017. No accretion of the redemption value was recorded for the years ended December 31, 2017 and 2018 as the redemption provisions were changed on December 1, 2016. The net carrying value of Series B redeemable convertible preferred stock as of December 31, 2018 includes \$2.1 million related to the change in the fair value of the redeemable convertible preferred stock tranche liability during the year ended December 31, 2018.

The redeemable convertible preferred stock is recorded outside of permanent equity because while it is not mandatorily redeemable, it will become redeemable upon the occurrence of certain liquidation events that are considered not solely within the Company's control. Accordingly, the redeemable convertible preferred stock has been presented in the mezzanine section on the consolidated balance sheets.

The holders of the Company's redeemable convertible preferred stock have various rights, preferences, and privileges as follows:

#### Conversion rights

Each share of redeemable convertible preferred stock shall be convertible, at the option of the holder, into such number of fully paid shares of common stock as is determined by dividing the original issue price by the conversion price in effect at the time of conversion. As of December 31, 2017 and 2018, the initial conversion price per share of redeemable convertible preferred stock is equivalent to the original issue price. The original issuance price was \$1.00 per share for the Series A redeemable convertible preferred stock and \$1.50 per share for the Series B redeemable convertible preferred stock.

The respective applicable conversion price is subject to adjustment upon any future stock splits or stock combinations, reclassifications or exchanges of similar stock, upon a reorganization, recapitalization, merger or consolidation of the Company, or upon the issuance or sale by the Company of common stock for consideration less than the applicable conversion price.

Each share of Series A and B redeemable convertible preferred stock automatically converts into the number of shares of common stock determined in accordance with the conversion rate upon the earlier of (a) written consent of a majority of the then outstanding shares of Series A and B redeemable convertible preferred stock, voting together as a single class or (b) the closing of a public offering in which the gross cash proceeds are at least \$50.0 million. See Note 14, "Subsequent events."

#### **Dividends**

The holders of the outstanding shares of each series of redeemable convertible preferred stock are entitled to receive, when and if declared by the Board of Directors, a cumulative cash dividend at the rate of 6% of the applicable original issue price per annum on each outstanding share of redeemable convertible preferred stock. Such dividends are payable in preference to any dividends for common stock declared by the Board of Directors. In the case of a dividend on common stock, the dividend per share of redeemable convertible preferred stock would also include the dividend payable on each share determined, if applicable, as if all redeemable convertible preferred stock had been converted to common stock. No dividends had been declared or paid to holders of redeemable convertible preferred stock as of December 31, 2018.

#### Liquidation

In the event of any liquidation, dissolution, winding up, or deemed liquidation event of the Company, either voluntary or involuntary, the holders of redeemable convertible preferred stock shall be entitled to receive pro rata, prior and in preference to any distribution to the holders of the common stock, an amount equal to the original issuance prices of each series (in each case, as adjusted for stock splits, stock dividends or distributions, recapitalizations, and similar events) and all declared but unpaid dividends, if any. If the assets and funds to be distributed among the holders of redeemable convertible preferred stock are insufficient to permit the payment to such holders, then the entire assets and funds of the Company legally available for distribution will be distributed ratably among the holders of redeemable convertible preferred stock in proportion to the preferential amount each such holder is otherwise entitled to receive.

Upon the payment of the full liquidation preference of redeemable convertible preferred stock, the remaining assets of the Company, if any, shall be distributed ratably to the holders of common stock.

#### Voting rights

Each share of redeemable convertible preferred stock has a number of votes equal to the number of shares of common stock into which it is convertible. The holders of Series A redeemable convertible preferred stock have the right to elect two members of the Company's Board of Directors. The holders of Series B redeemable convertible preferred stock have the right to elect one member of the Company's Board of Directors. The holders of common stock have the right to elect one member of the Company's Board of Directors. The holders of common stock and redeemable convertible preferred stock, voting together as a single class on an as-converted basis, are entitled to elect one member of the Board of Directors.

# 9. Common stock

As of December 31, 2017 and December 31, 2018, the Company's certificate of incorporation authorized the Company to issue 94,695,000 and 172,000,000 shares of common stock, respectively, at a par value of

\$0.0001 per share. As of December 31, 2018, the Company has reserved shares of common stock for issuance upon conversion of redeemable convertible preferred stock and exercise of stock options. Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, subject to prior rights of the redeemable convertible preferred stockholders. As of December 31, 2018, no dividends have been declared to date.

The Company has reserved shares of common stock, on an as-converted basis, for future issuance as follows:

	Decem	ber 31,
	2017	2018
Redeemable convertible preferred stock	70,221,732	146,221,732
Outstanding options to purchase common stock	4,774,667	7,945,533
Available for future issuance under the 2014 Equity Incentive Plan	728,294	1,953,480
Total	75,724,693	156,120,745

# 10. Stock-based compensation

In December 2014, the Company adopted the 2014 Equity Incentive Plan (2014 Plan). The 2014 Plan provides for the Company to issue restricted common stock, or to grant incentive stock options or nonqualified stock options for the purchase of common stock, to employees, members of the Board of Directors and consultants of the Company under terms and provisions established by the Board of Directors. The Company generally grants stock-based awards with service-based vesting conditions only. Options granted typically vest over a four-year period but may be granted with different vesting terms.

The following summarizes option activity under the 2014 Plan:

	Number of options	av	ghted- erage ise price	Weighted- average remaining contractual term		gregate isic value
				(in years)	(in th	ousands)
Balance, January 1, 2017	2,539,041	\$	0.08			
Options granted	5,252,000		0.10			
Options exercised	(2,810,957)		0.08			
Options cancelled	(205,417)		0.09			
Balance, December 31, 2017	4,774,667	\$	0.09	8.94	\$	95
Options granted	7,006,374		0.24			
Options exercised	(3,181,562)		0.13			
Options cancelled	(653,946)		0.19			
Balance, December 31, 2018	7,945,533	\$	0.20	8.76	\$	5,085
Options vested and expected to vest as of December 31,						
2018	7,945,533	\$	0.20	8.76	\$	5,085
Options vested and exercisable as of December 31, 2018	2,366,860	\$	0.11	8.10	\$	1,734

The aggregate intrinsic values of options outstanding, exercisable, vested and expected to vest were calculated as the difference between the exercise price of the options and the estimated fair value of the Company's

common stock, as determined by the Board of Directors. The intrinsic value of options exercised for the years ended December 31, 2017 and 2018 was less than \$0.1 million and \$0.4 million, respectively.

During the years ended December 31, 2017 and 2018, the weighted-average grant-date fair value of options granted was \$0.07 and \$0.39 per share, respectively. As of December 31, 2018, there was \$2.1 million of unrecognized stock-based compensation expense related to unvested stock options that is expected to be recognized over a weighted-average period of 2.7 years.

The total fair value of options vested for the years ended December 31, 2017 and December 31, 2018 was \$0.1 million and \$0.7 million, respectively.

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

	Year ended I	December 31,
	2017	2018
Expected term (years)	5–6	5–6
Expected volatility	79%–81%	79%–81%
Risk-free interest rate	1.8%-2.2%	2.5%-3.0%
Dividend yield	0%	0%

Non-employee stock option awards were measured at fair value at each reporting period using a Black-Scholes option-pricing model with the following assumptions:

	Year ended	December 31,
	2017	2018
Expected term (years)	8–10	7–10
Expected volatility	79%–81%	80%
Risk-free interest rate	2.0%-2.4%	2.9%-3.0%
Dividend yield	0%	0%

The fair value of the shares of common stock underlying stock options has historically been determined by the Company's Board of Directors. Because there has been no public market for the Company's common stock, the Board of Directors has determined fair value of the common stock at the time of grant of the option by considering a number of objective and subjective factors including important developments in the Company's operations, valuations performed by an independent third party, sales of redeemable convertible preferred stock, actual operating results and financial performance, the conditions in the biotechnology industry and the economy in general, the stock price performance and volatility of comparable public companies, and the lack of liquidity of the Company's common stock, among other factors.

The Black-Scholes model assumptions that determine the fair value of stock-based awards include:

Expected term—The expected term represents the weighted-average period the stock options are expected to remain outstanding and is based on the options' vesting terms, contractual terms and industry peers, as the Company did not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior.

Expected volatility—Since the Company is privately held and does not have any trading history for its common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded biotechnology companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, stage in the life cycle or area of specialty.

Risk-free interest rate—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of option.

Expected dividend—The Company has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

Total stock-based compensation expense by function was as follows:

	Year ended December 31	
	2017 201	18
	(in thousand	is)
Research and development	\$ 107 \$ 5	563
General and administrative	342	292
Total		855

Stock-based compensation related to options granted to non-employees was less than \$0.1 million and \$0.3 million for the years ended December 31, 2017 and 2018, respectively.

The Company allows its employees, non-employees and directors to exercise options granted under the 2014 Plan prior to vesting. The shares related to early exercised stock options are subject to the Company's lapsing repurchase right upon termination of employment at the original purchase price. In order to vest, the holders are required to provide continued service to the Company. The proceeds are initially recorded in other noncurrent liabilities and are reclassified to common stock and additional paid-in capital as the repurchase right lapses. As of December 31, 2017 and 2018, there were 2,634,880 and 2,996,264 shares, respectively, and \$0.3 million and \$0.3 million, respectively, recorded in other noncurrent liabilities, related to early exercised shares that were subject to repurchase.

#### Restricted stock

In 2014, the Company issued restricted stock awards to employees and directors under the 2014 Plan at a purchase price of \$0.0001 per share. The shares related to restricted stock awards vest over a four-year period and are subject to a lapsing repurchase right upon termination of employment at the original purchase price. Recipients of restricted stock awards have voting and dividend rights with respect to such shares upon grant without regard to vesting.

A summary of restricted stock activity follows:

	Number of restricted shares outstanding
Unvested restricted stock, January 1, 2017	3,464,583
Restricted stock vested	(1,263,020)
Unvested stock repurchased	(1,311,980)
Unvested restricted stock, December 31, 2017	889,583
Restricted stock vested	(889,583)
Unvested restricted stock, December 31, 2018	

The total fair value of restricted stock vested during the years ended December 31, 2017 and 2018 was less than \$0.1 million for both years presented. As of December 31, 2017 and 2018, the liability for unvested restricted stock that was subject to repurchase was less than \$0.1 million and zero, respectively.

#### 11. Income taxes

No provision for income taxes was recorded for the years ended December 31, 2017 and 2018. The Company has incurred net pre-tax losses in the United States only for all periods presented. The Company has not reflected any benefit of such net operating loss carryforwards in the accompanying consolidated financial statements.

The provision for income taxes differs from the amount expected by applying the federal statutory rate to the loss before taxes as follows:

	Year e Decem	
	2017	2018
Federal statutory income tax rate	34.0%	21.0%
State income tax rate, net of federal benefit	5.9	(17.2)
Research and development tax credits	2.2	4.4
Change in valuation allowance	(17.0)	(7.0)
Non-deductible permanent expenses	(0.2)	(1.4)
Remeasurement of deferred tax due to tax law change	(24.6)	
Other	(0.3)	0.2
Provision for income taxes	0.0%	0.0%

In December 2017, the U.S. government enacted comprehensive tax legislation through the Tax Cuts and Jobs Act (Tax Act). The Tax Act significantly revises the future ongoing U.S. corporate income tax by, among other things, lowering the U.S. corporate income tax rates and implementing a modified territorial tax system. The corporate tax rate was reduced from 34% to 21% for tax years beginning after December 31, 2017. Changes in tax law are accounted for in the period of enactment. As such, the Company's consolidated financial statements as of December 31, 2017 reflect the impact of this Tax Act, which primarily consisted of remeasuring the Company's deferred tax assets and valuation allowance using the newly enacted U.S. corporate tax rate. This rate change resulted in a \$7.7 million reduction in the Company's net deferred tax assets from the prior year with a corresponding offset to the valuation allowance. Under the Tax Act, net operating losses arising after December 31, 2017 do not expire and cannot be carried back. However, the Tax Act limits the amount of net operating losses that can be used annually to 80% of taxable income for periods beginning after December 31, 2017. Existing net operating losses arising in years ending on or before December 31, 2017 are not affected by these provisions.

In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118 (SAB 118), which provides guidance for the tax effects of the 2018 Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act's enactment date for companies to complete the accounting under ASC 740. In accordance with SAB 118, the Company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that the Company's accounting for certain income tax effects of the Tax Act is incomplete, but is it able to determine a reasonable estimate, the Company must record a provisional estimate in its financial statements. If the Company cannot determine a provisional estimate to be included in its financial statements, it should continue to apply ASC 740 on the basis of the provisions of the tax laws that were in effect immediately before the enactment of the Tax Act. The amounts of the tax effects related to the Tax Act reflected in the Company's consolidated financial statements as of December 31, 2017 represented the Company's reasonable estimates and were provisional amounts within the meaning of SAB 118. The Company completed its analysis of the Tax Act's income tax effects during the year ended December 31, 2018. There was no material impact to the consolidated financial statements as of and for the year ended December 31, 2018.

The Company has established a valuation allowance against its deferred tax assets due to the uncertainty surrounding the realization of such assets. Significant components of the Company's deferred tax assets and liabilities are summarized as follows:

	Decem	ber 31,
	2017	2018
	(in thou	usands)
Deferred tax assets:		
Net operating loss carryforwards	\$ 16,448	\$ 19,579
Accruals and reserves	1,331	11,338
Research and development credits	1,403	6,707
Fixed assets and finite-lived intangible assets	524	_
Stock-based compensation	35	147
Other	15	13
Gross deferred tax assets	19,756	37,784
Less: valuation allowance	(19,756)	(34,870)
Total deferred tax assets	<del></del>	2,914
Deferred tax liabilities:		
Fixed assets and finite-lived intangible assets	<del>-</del>	(2,914)
Indefinite-lived intangible asset	<del>-</del>	(12,192)
Gross deferred tax liabilities		(15,106)
Net deferred tax liability	\$ —	\$(12,192)

The realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Due to the lack of earnings history, the net deferred tax assets have been offset by a valuation allowance. The valuation allowance increased by \$5.3 million and \$15.1 million during the years ended December 31, 2017 and 2018, respectively.

The net deferred tax liability represents the difference between the book and tax basis for in-process research and development acquired in connection with the acquisition of Warp Drive. See Note 7, "Acquisition of Warp Drive."

The Company had net operating loss carryforwards for federal, California and Massachusetts income tax purposes of \$93.2 million, \$58.8 million and \$38.2 million, respectively, as of December 31, 2018. The federal and Massachusetts net operating loss carryforwards, if not utilized, will expire beginning in 2031. California net operating loss carryforwards, if not utilized, will expire beginning in 2034. Under the Tax Act, federal net operating losses arising after December 31, 2017 do not expire and cannot be carried back. However, the Tax Act limits the amount of federal net operating losses that can be used annually to 80% of taxable income for periods beginning after December 31, 2017. Existing federal net operating losses arising in years ending on or before December 31, 2017 are not affected by these provisions.

The Company also had federal and state research and development credit carryforwards of \$5.9 million and \$3.9 million, respectively, as of December 31, 2018. The federal credits will expire starting in 2030 if not utilized and the state research credits will expire beginning in 2026, with the exception of \$2.8 million in California research credits, which can be carried forward indefinitely.

Federal, California and Massachusetts tax laws impose significant restrictions on the utilization of net operating loss carryforwards in the event of a change in ownership of the Company, as defined by Internal Revenue Code Section 382 (Section 382). The Company performed a study in which it determined that it had experienced a change in ownership in June 2018 as defined by Section 382. No federal or state net operating losses are expected to expire unutilized as a result of the limitation. In addition, in the future the Company may

experience ownership changes, which may limit the utilization of net operating loss carryforwards or other tax attributes.

#### Unrecognized tax benefits

No liability related to uncertain tax positions has been recorded in the consolidated financial statements.

A reconciliation of the beginning and ending amount of gross unrecognized tax benefits is as follows:

	Decen	nber 31,
	2017	2018
	(in tho	usands)
Beginning balance	\$261	\$ 525
Changes related to tax positions taken in the prior year	(15)	872
Changes related to tax positions taken in current year	279	1,044
Ending balance	\$525	\$ 2,441

The Company has unrecognized tax benefits of \$0.5 million and \$2.2 million as of December 31, 2017 and 2018, which would affect the effective tax rate if recognized; however, recognition would be in the form of a deferred tax attribute which would likely be offset by a valuation allowance.

The Company does not anticipate any significant changes to unrecognized tax benefits over the next 12 months.

Income tax returns are filed in the United States, California and Massachusetts. The years 2010 through 2018 remain open to examination by the domestic taxing jurisdictions to which the Company is subject. Net operating losses generated on a tax return basis by the Company for 2010 through 2018 remain open to examination by the domestic taxing jurisdictions.

# 12. Net loss per share attributable to common stockholders and unaudited pro forma net Loss per share

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

	Year ended December			ber 31,	
		2017		2018	
	(in thousands, except share and per share data)				
Numerator:					
Net loss	\$	(31,127)	\$	(41,789)	
Redeemable convertible preferred stock dividends—undeclared and cumulative		(3,763)		(7,031)	
Net loss attributable to common stockholders	\$	(34,890)	\$	(48,820)	
Denominator:					
Weighted-average shares outstanding	1	2,018,319		15,283,682	
Less: Weighted-average unvested restricted shares and shares subject to repurchase	(	(3,632,146)		(4,097,395)	
Weighted-average shares used to compute net loss per share attributable to common stockholders—basic and diluted		8,386,173		11,186,287	
Net loss per share attributable to common stockholders—basic and diluted	\$	(4.16)	\$	(4.36)	

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

	Decemb	per 31,
	2017	2018
Redeemable convertible preferred stock	70,221,732	144,016,937
Options to purchase common stock	4,774,667	7,945,533
Options early exercised subject to future vesting	2,634,880	2,996,264
Restricted stock subject to future vesting	889,583	_
Total	78,520,862	154,958,734

## Unaudited pro forma net loss per share

The following table sets forth the computation of unaudited pro forma basic and diluted net loss per share for the year ended December 31, 2018:

	Year end	led December 31, 2018		
	excep	(unaudited, in thousands, except share and per share data)		
Numerator:				
Net loss attributable to common stockholders	\$	(48,820)		
Adjust: Redeemable convertible preferred stock dividends—undeclared and cumulative		7,031		
Adjust: Change in fair value of redeemable convertible preferred stock liability		2,121		
Pro forma net loss	\$	(39,668)		
Denominator:		· · ·		
Weighted average shares used to compute net loss per share attributable to common				
stockholders—basic and diluted		11,186,287		
Pro forma adjustment to reflect conversion of redeemable convertible preferred stock		101,528,454		
Weighted average shares used in computing pro forma net loss per share—basic and diluted		112,714,741		
Pro forma net loss per share—basic and diluted	\$	(0.35)		

# 13. Related party relationships

In October 2018, the Company acquired all outstanding shares of Warp Drive Bio, Inc., or Warp Drive. In connection with the acquisition, the Company issued 33,079,554 shares of Series B redeemable convertible preferred stock (the Acquisition Shares). Of the Acquisition Shares, 8,315,308 shares of Series B redeemable convertible preferred stock were issued to entities affiliated with Third Rock Ventures, a related party. In addition, Alexis Borisy, who is currently a member of the Company's board of directors and was a member of the Company's board of directors at the time of the acquisition of Warp Drive, was then an affiliate of Third Rock Ventures. Of the Acquisition Shares, 16,364,939 shares of Series B redeemable convertible preferred stock were issued to Sanofi, which became a related party following the acquisition. See Note 6, "Sanofi collaboration agreement," for a discussion of the Sanofi collaboration agreement.

In connection with the Company's acquisition of Warp Drive, the Company assumed a Convertible Note issued by Warp Drive to an entity affiliated with Third Rock Ventures, dated October 8, 2018. The Convertible Note was issued in a principal amount of \$2.0 million, with interest at an annual rate of 8% computed on the basis of a 360-day year. On October 30, 2018, at the Company's election, the Company converted the Convertible Note into 975,620 shares of Series B redeemable convertible preferred stock which were issued to an entity affiliated with Third Rock Ventures pursuant to the terms of the Convertible Note.

Following the Company's acquisition of Warp Drive, in January 2019, the Company entered into a sublease agreement with Casma to sublease the Cambridge Lease. The sublease by Casma and related sublease payments by Casma to the Company are fully guaranteed by an affiliate of Third Rock Ventures.

From July 2015 to June 2018, the Company subleased a portion of its Redwood City Lease to Pliant Therapeutics, Inc., an entity affiliated with Third Rock Ventures.

## 14. Subsequent events

Subsequent events have been evaluated through September 19, 2019, which is the date that these annual consolidated financial statements were available to be issued.

During June and July 2019, the Company issued a total of 48,683,038 shares of Series C redeemable convertible preferred stock at a price of \$2.06 per share for total proceeds of \$100.0 million, net of issuance costs. The original issue price for the conversion and liquidation preference calculations described in Note 8, "Redeemable Convertible Preferred Stock" for the Series C redeemable convertible preferred stock is \$2.06. The automatic conversion feature for all series of redeemable convertible preferred stock related to the closing of an IPO of common stock resulting in at least \$50 million in gross proceeds, was adjusted to also require a minimum IPO price of \$2.06 per share of common stock, subject to adjustment for stock dividends, stock splits, combinations or other similar recapitalizations.

In March 2019, the Company granted options to purchase an aggregate of 5,900,988 shares of common stock with an exercise price of \$0.84 per share. In August 2019, the Company granted options to purchase an aggregate of 9,829,904 shares of common stock with an exercise price of \$0.97 per share.

In January 2019, the Company sold the genome mining platform and related Roche collaboration agreement acquired during the Warp Drive acquisition to Gingko Bioworks (Gingko). The Company received \$6.0 million in cash consideration from Gingko and Roche as part of the transaction, and is entitled to receive up to 25% of future milestones earned by Gingko under the collaboration agreement with Roche included as part of this sale. The Company recognized a loss on disposal of \$0.6 million in 2019 as a result of this sale.

#### Events Subsequent to Original Issuance of Consolidated Financial Statements (unaudited)

In November 2019, the Company entered into a clinical trial collaboration agreement with Amgen, Inc. (Amgen) to evaluate the combination of the Company's SHP2 inhibitor, RMC-4630, with Amgen's KRAS<sup>G12C</sup> inhibitor, AMG 510, in a clinical study. Amgen will be responsible for conducting the clinical study at their cost. The Company will be responsible for providing Amgen with clinical supply of RMC-4630 for the planned study.

In December 2019, the Company granted options to purchase 1,348,025 shares of common stock with an exercise price of \$1.54.

# Revolution Medicines, Inc. Condensed consolidated balance sheets

(in thousands, except share and per share data) (unaudited)

	December 31, 2018		Sep	tember 30, 2019		Pro forma ptember 30, 2019	
Assets	'						
Current assets:							
Cash and cash equivalents	\$	69,586	\$	21,824			
Marketable securities		_		114,464			
Receivable from related party		7,303		8,950			
Prepaid expenses and other current assets		1,945		3,879			
Assets held for sale		6,597					
Total current assets		85,431		149,117			
Property and equipment, net		6,872		6,780			
Intangible assets, net		63,082		62,280			
Goodwill		14,608		14,608			
Restricted cash		214		214			
Other noncurrent assets		379		1,746			
Total assets	\$	170,586	\$	234,745			
Liabilities, redeemable convertible preferred stock and stockholders'							
(deficit) equity							
Current liabilities:							
Accounts payable	\$	5,236	\$	6,013			
Accrued expenses and other current liabilities		8,486		13,118			
Deferred revenue, related party, current		16,830		19,509			
Total current liabilities		30,552		38,640			
Deferred rent, noncurrent		2,254		1,881			
Deferred revenue, related party, noncurrent		28,413		15,598			
Deferred tax liability		12,192		12,192			
Other noncurrent liabilities		516		766			
Total liabilities		73,927		69,077			
Commitments and contingencies (Note 6) Redeemable convertible preferred stock, \$0.0001 par value; 146,221,732 and 192,904,770 shares authorized at December 31, 2018 and September 30, 2019, respectively; 144,016,937 and 192,699,975 shares issued and outstanding at December 31, 2018 and September 30, 2019, respectively; aggregate liquidation preference of \$194,133 and \$303,928 at December 31, 2018 and September 30, 2019, respectively; no shares issued and outstanding, September 30, 2019, pro forma		205,081		305,114	\$		
		200,001		000,117	Ψ		
Stockholders' (deficit) equity:  Common stock, \$0.0001 par value; 172,000,000 and 249,000,000 shares authorized at December 31, 2018 and September 30, 2019, respectively; 15,615,007 and 16,067,480 shares issued and outstanding at December 31, 2018 and September 30, 3019, respectively; 208,767,455 shares issued and outstanding, September 30, 2019, pro							
forma		2		2		21	
Additional paid-in capital		1,298		3,288		308,383	
Accumulated other comprehensive income		<u> </u>		54		54	
Accumulated deficit		(109,722)		(142,790)		(142,790	
Total stockholders' (deficit) equity		(108,422)		(139,446)	\$	165,668	
Total liabilities, redeemable convertible preferred stock and stockholders'		, , ,		,,			
(deficit) equity	\$	170,586	\$	234,745			

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

# Revolution Medicines, Inc. Condensed consolidated statements of operations and comprehensive loss

(in thousands, except share and per share data) (unaudited)

	Nine months ended September 30,				
	· <u></u>	2018		2019	
Revenue:					
Collaboration revenue, related party	\$	9,818	\$	37,953	
Operating expenses:					
Research and development		32,903		64,265	
General and administrative		5,575		8,244	
Total operating expenses		38,478		72,509	
Loss from operations		(28,660)		(34,556)	
Other income (expense), net:					
Interest income		414		1,571	
Interest and other expense		(83)		(83)	
Change in fair value of redeemable convertible preferred stock liability		(2,121)		<u> </u>	
Total other income (expense), net		(1,790)		1,488	
Net loss		(30,450)		(33,068)	
Other comprehensive income:					
Net unrealized gains on marketable securities		<del>-</del>		54	
Comprehensive loss	\$	(30,450)	\$	(33,014)	
Redeemable convertible preferred stock dividends—undeclared and cumulative		(4,512)		(9,987)	
Net loss attributable to common stockholders	\$	(34,962)	\$	(43,055)	
Net loss per share attributable to common stockholders—basic and diluted	\$	(3.24)	\$	(3.25)	
Weighted-average shares used to compute net loss per share attributable to common					
stockholders—basic and diluted	1	0,788,811		3,253,020	
Pro forma net loss per share—basic and diluted			\$	(0.19)	
Weighted-average shares used in computing pro forma net loss per share—basic and diluted			17	7,481,855	

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

# Revolution Medicines, Inc. Condensed consolidated statements of redeemable convertible preferred stock and stockholders' deficit

(in thousands, except share data) (unaudited)

						Accumulated		
	Redeemable c	onvertible			Additiona			Total
	preferred		Common	stock	paid-in	comprehensive	Accumulated	
	Shares	Amount	Shares	Amount	capital	income	deficit	deficit
Balance at January 1,	Onares	Amount	Onares	Amount	capitai	ilicome	delicit	dencit
2018	70,221,732	\$ 72.248	13,011,059	\$ 1	\$ 215	; \$ —	\$ (67,933)	\$ (67,717)
Issuance of Series	., , .	, -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	•	•	(- ,,	, (- , ,
B redeemable								
convertible								
preferred stock								
for cash at \$1.50 per share, net of								
issuance costs of								
\$204, adjusted								
for the								
redeemable								
convertible preferred stock								
liability of \$2,121	37,620,613	58,347		_	_		_	_
Issuance of	01,020,010	00,011						
common stock								
pursuant to stock								
option exercises	_	<del>-</del>	340,539	_	31	<del>-</del>	_	31
Issuance of common stock								
pursuant to early								
exercised stock								
options	_	_	2,621,525	_	_		_	_
Vesting of early								
exercised stock options and								
restricted stock	_	_	_	1	120	)	_	121
Stock-based								
compensation								
expense			_	_	574		(20, 450)	574
Net loss Balance at			_		_	_	(30,450)	(30,450)
September 30,								
2018	107,842,345	\$ 130,595	15,973,123	\$ 2	\$ 940	) \$	\$ (98,383)	\$ (97,441)
Balance at January 1,							· · ·	
2019	144,016,937	\$ 205,081	15,615,007	\$ 2	\$ 1,298	3 \$ —	\$ (109,722)	\$ (108,422)
Issuance of Series								
C redeemable convertible								
preferred stock								
for cash at \$2.06								
per share, net of								
issuance costs of	40.000.000	400.000						
\$254 Issuance of	48,683,038	100,033	_	_	<del>-</del>	<del>_</del>	_	_
common stock								
pursuant to stock								
option exercises	_	_	341,507	_	114	_	_	114
Issuance of								
common stock								
pursuant to early exercised stock								
options	_	_	490,838	_	_	<u> </u>	_	_
Vesting of early			,,,,,,					
exercised stock								
options	<del>-</del>	_	_	_	113	_	_	113
Repurchases of early exercised								
stock	_	_	(379,872)	_	_	- <u>-</u>		_
Stock-based			, , , = _,					
compensation					, = -			. ===
expense	_	— —	_	_	1,763	_	<del>-</del>	1,763

Net unrealized gains on marketable securities	_	_	_	_	_	54	_	54
Net loss	_	_	_	_	_	_	(33,068)	(33,068)
Balance at September 30, 2019	192,699,975	\$ 305,114	16,067,480	\$ 2	\$ 3,288 \$	54 \$	(142,790) \$	(139,446)

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

# Revolution Medicines, Inc. Condensed consolidated statements of cash flows

(in thousands) (unaudited)

		nths ended nber 30,
	2018	2019
Cash flows from operating activities		
Net loss	\$ (30,450)	\$ (33,068
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Amortization of intangible assets	_	802
Stock-based compensation expense	574	1,763
Depreciation and amortization	1,073	1,675
Loss on disposal of property and equipment		50
Loss on disposal of held for sale assets	_	597
Net amortization (accretion) of premium (discount) on marketable securities	_	(307
Change in fair value of redeemable convertible preferred stock liability	2,121	· <u>-</u>
Changes in operating assets and liabilities:		
Receivable from related party	(5,908)	(1,647
Prepaid expenses and other current assets	(1,410)	(1,934
Accounts payable	17	1,031
Accrued expenses and other current liabilities	(112)	4,632
Deferred revenue, related party	47,601	(10,136
Deferred rent	(409)	(373
Other noncurrent assets		(1,259
Other noncurrent liabilities	(108)	210
Net cash provided by (used in) operating activities	12,989	(37,964
Cash flows from investing activities		
Purchases of marketable securities	_	(143,682
Maturities of marketable securities	_	29,579
Purchases of property and equipment	(1,283)	(2,079
Proceeds from sale of property and equipment	_	192
Proceeds from sale of held for sale assets		6,000
Net cash used in investing activities	(1,283)	(109,990
Cash flows from financing activities		
Proceeds from issuance of redeemable convertible preferred stock, net of issuance costs	56,225	100,033
Proceeds from issuance of common stock under equity incentive plans	401	227
Repurchases of early exercised stock options	_	40
Payments of deferred offering costs		(108
Net cash provided by financing activities	56,626	100,192
Net (decrease) increase in cash, cash equivalents and restricted cash	68,332	(47,762
Cash, cash equivalents and restricted cash—beginning of period	9,079	69,800
Cash, cash equivalents and restricted cash—end of period	\$ 77,411	\$ 22,038
Reconciliation of cash, cash equivalents and restricted cash to consolidated balance sheets	· · · ·	, ,
Cash and cash equivalents	\$ 77,411	\$ 21,824
Restricted cash	Ψ //, <del>-</del> /11	214
Cash, cash equivalents and restricted cash—end of period	\$ 77,411	\$ 22,038
	Ψ 11, τ11	Ψ 22,000
Supplemental disclosure of non-cash investing and financing activities  Vesting of early exercised options and restricted stock	¢ 121	\$ 113
Purchases of property and equipment in accounts payable and accrued expenses and other current liabilities	\$ 121	
Extinguishment of redeemable convertible preferred stock liability	(24) 2,314	(254
Unpaid deferred offering costs	2,314	1,194

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

# Revolution Medicines, Inc. Notes to unaudited condensed consolidated financial statements

# 1. Company and liquidity

#### Description of the business

Revolution Medicines, Inc. (the Company) is a clinical-stage precision oncology company focused on developing novel targeted therapies to inhibit targets primarily within the RAS and mTOR signaling pathways. The Company was founded in October 2014 and is headquartered in Redwood City, California.

#### Liquidity

The Company has incurred net operating losses in all periods since inception. The Company's net losses were \$30.5 million and \$33.1 million for the nine months ended September 30, 2018 and 2019, respectively. As of September 30, 2019, the Company had an accumulated deficit of \$142.8 million. Management believes that its cash and cash equivalents are sufficient to continue operating activities for at least 12 months following the issuance date of these condensed consolidated financial statements. To date, the Company has been able to fund its operations through the issuance and sale of redeemable convertible preferred stock in addition to proceeds received under the Company's collaboration agreement with Sanofi. Future capital requirements will depend on many factors, including the timing and extent of spending on research and development and payments the Company may receive under the Sanofi collaboration agreement or future collaboration agreements, if any. There can be no assurance that, in the event the Company requires additional financing, such financing will be available at terms acceptable to the Company if at all. Failure to generate sufficient cash flows from operations, raise additional capital, and reduce discretionary spending should additional capital not become available could have a material adverse effect on the Company's ability to achieve its intended business objectives.

# 2. Summary of significant accounting policies

#### Basis of presentation

The accompanying condensed consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States (GAAP) and applicable rules and regulations of the Securities and Exchange Commission (SEC) regarding interim financial reporting. Certain information and note disclosures normally included in the financial statements prepared in accordance with GAAP have been condensed or omitted in accordance with such rules and regulations. The accompanying condensed consolidated financial statements as of and for the nine months ended September 30, 2019 include the accounts of the Company and its wholly owned subsidiary, Warp Drive Bio, Inc. (Warp Drive). The accompanying condensed consolidated financial statements as of and for the nine months ended September 30, 2018 include only the accounts of Revolution Medicines, Inc. All intercompany balances and transactions have been eliminated in consolidation. The functional and reporting currency of the Company and its subsidiary is the U.S. dollar.

#### Unaudited interim condensed consolidated financial statements

The accompanying condensed consolidated balance sheet as of September 30, 2019 and the condensed consolidated statements of operations and comprehensive loss, the condensed consolidated statements of cash flows and the condensed consolidated statements of redeemable convertible preferred stock and stockholders'

deficit for the nine months ended September 30, 2018 and 2019 are unaudited. The financial data and other information disclosed in these notes related to the nine months ended September 30, 2018 and 2019 are also unaudited. The condensed consolidated balance sheet data as of December 31, 2018 was derived from audited financial statements as of that date, but does not include all disclosures required by GAAP.

The unaudited interim consolidated financial statements have been prepared on the same basis as the audited annual consolidated financial statements as of and for the year ended December 31, 2018, and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's financial position as of September 30, 2019, and the results of its operations and its cash flows for the nine months ended September 30, 2018 and 2019. These unaudited interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements as of and for the year ended December 31, 2018, and the notes thereto, which are included elsewhere in this Registration Statement. The results for the nine months ended September 30, 2019 are not necessarily indicative of results to be expected for the year ending December 31, 2019, any other interim periods, or any future year or periods.

#### Use of estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, clinical accruals, valuation of in-process research and development and developed technologies, valuation of the redeemable convertible preferred stock liability, income taxes, useful lives of property and equipment and intangible assets, impairment of goodwill, and stock- based compensation. Actual results could materially differ from those estimates.

#### Unaudited pro forma financial information

The unaudited pro forma information as of September 30, 2019 has been prepared to give effect to the automatic conversion of all of the outstanding redeemable convertible preferred stock of the Company on a one-to-one basis into 192,699,975 shares of common stock, which will occur upon the closing of an initial public offering (IPO) of common stock resulting in at least \$50 million in gross proceeds at a minimum price of \$2.06 per share of common stock, subject to adjustment for stock dividends, stock splits, combinations or other similar recapitalizations (a Qualified IPO). The unaudited pro forma information does not assume any proceeds from an IPO.

The unaudited pro forma basic and diluted net loss per share for the nine months ended September 30, 2019 has been computed to give effect to (1) an adjustment to the denominator in the pro forma basic and diluted net loss per share calculation for the automatic conversion of the redeemable convertible preferred stock into shares of common stock, which will occur upon the closing of a Qualified IPO, as of the beginning of the period or the date of issuance, if later and (2) an adjustment to the numerator in the pro forma basic and diluted net loss per share calculation to remove the cumulative but undeclared redeemable convertible preferred stock dividends.

## Cash and cash equivalents

The Company considers all highly liquid investments purchased with original maturities of three months or less at the date of purchase to be cash equivalents. As of December 31, 2018, cash equivalents consist of amounts

invested in money market funds. As of September 30, 2019, cash equivalents consist of amounts invested in money market funds and investments in U.S. government agency bonds, commercial paper and corporate bonds with original maturities of three months or less at the date of purchase.

#### Marketable securities

Investments in marketable securities primarily consist of U.S. government debt securities, U.S. government agency bonds, commercial paper and corporate bonds. The Company has classified its marketable securities as available-for-sale and may sell these securities prior to their stated maturities. The Company views these marketable securities as available to support current operations, and classifies marketable securities with maturities beyond 12 months as current assets. The Company's investments in marketable securities are carried at estimated fair value, which is derived from independent pricing sources based on quoted prices in active markets for similar securities. Unrealized gains and losses are reported as a component of accumulated other comprehensive income on the condensed consolidated balance sheets until realized. The amortized cost of marketable securities is adjusted for amortization of premiums and accretion of discounts to maturity, which is included in interest income on the condensed consolidated statements of operations and comprehensive loss. Realized gains and losses are included in interest income on the condensed consolidated statements of operations and comprehensive loss.

The Company periodically evaluates its investments to assess whether those with unrealized loss positions are other than temporarily impaired. The Company considers various factors in determining whether to recognize an impairment charge. If the Company determines that the decline in an investment's fair value is other-than-temporary, the difference is recognized as an impairment loss in the condensed consolidated statements of operations and comprehensive loss. As of September 30, 2019, no other-than-temporary-impairment has been recorded.

#### Restricted cash

As of December 31, 2018 and September 30, 2019, the Company had \$0.2 million of noncurrent restricted cash related to a Company-issued letter of credit in connection with a lease. The entire amount is held in a separate bank account to support a letter of credit agreement for the lease. There was no restricted cash as of September 30, 2018.

#### Concentration of credit risk and other risks and uncertainties

Financial instruments that potentially subject the Company to concentration of credit risk consist of cash, cash equivalents and marketable securities. The Company's cash is held by one financial institution in the United States, which management believes to be of high credit quality. Deposits at this financial institution may at times exceed federally insured limits. The Company invests in money market funds, U.S. government debt securities, U.S. government agency bonds, commercial paper and corporate bonds with high-quality accredited financial institutions. The Company has not experienced any losses on its deposits of cash and cash equivalents.

The Company is subject to credit risk as its receivable from related party and collaboration revenue, related party are entirely related to its collaboration agreement with Sanofi. See Note 7, "Sanofi collaboration agreement."

#### Fair value measurement

The carrying amounts of the Company's certain financial instruments, including cash equivalents, accounts payable and accrued expenses and other current liabilities approximate fair value due to their relatively short maturities and market interest rates, if applicable.

Assets and liabilities recorded at fair value on a recurring basis in the condensed consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active; and

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

#### Property and equipment, net

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation is computed on a straight-line basis over the estimated useful lives of the related assets, which is generally three to five years. Leasehold improvements are amortized using the straight-line method over the shorter of the assets' estimated useful lives or the remaining term of the lease. Maintenance and repairs are charged to operating expenses as incurred. Upon sale or retirement of assets, the cost and related accumulated depreciation are removed from the condensed consolidated balance sheet and the resulting gain or loss is reflected in the condensed consolidated statement of operations and comprehensive loss.

Useful lives of property and equipment are as follows:

Property and equipment	Estimated useful life
Laboratory equipment	4-5 years
Leasehold improvements	Lesser of estimated useful life or remaining lease term
Computer equipment and software	3 years
Furniture and fixtures	5 years

## Impairment of long-lived assets

Long-lived assets are reviewed for indications of possible impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset group may not be recoverable. Recoverability is measured by comparison of the carrying amounts of the asset group to the future undiscounted cash flows attributable to these assets. An impairment loss is recognized to the extent an asset group is not recoverable, and the carrying amount exceeds the projected discounted future cash flows arising from these assets. There were no impairments of long-lived assets for any of the periods presented.

#### Acquired intangible assets

Indefinite-lived intangible assets represent the estimated fair value assigned to in-process research and development (IPR&D) acquired in a business combination. The Company reviews indefinite-lived intangible

assets for impairment at least annually or more frequently if events or changes in circumstances indicate that the carrying value of the assets might not be recoverable. If the carrying value of an indefinite-lived intangible asset exceeds its fair value, then it is written down to its fair value. As of September 30, 2019, no such impairment has been recorded. For IPR&D, if a product candidate derived from the indefinite-lived intangible asset is developed and commercialized, the useful life will be determined, and the carrying value will be amortized prospectively over that estimated useful life. Alternatively, if a product candidate is abandoned, the carrying value of the intangible asset will be immediately charged to research and development expenses in the condensed consolidated statements of operations and comprehensive loss.

Finite-lived intangible assets acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition date and are carried at cost less accumulated amortization and impairment. Amortization is computed using the straight- line method over the estimated useful lives of the respective finite-lived intangible assets. Intangible assets are reviewed for impairment at least annually or more frequently if indicators of potential impairment exist. As of September 30, 2019, no such impairment has been recorded.

#### Goodwill

Goodwill represents the excess of the purchase price over the estimated fair value of the net tangible and intangible assets acquired in a business combination. The Company reviews goodwill for impairment at least annually or more frequently if events or changes in circumstances indicate that the carrying value of goodwill may not be recoverable. Goodwill is tested for impairment at the reporting unit level by first assessing the qualitative factors to determine whether it is more likely than not that the fair value of the Company's single reporting unit is less than its carrying amount. Qualitative indicators assessed include consideration of macroeconomic, industry and market conditions, the Company's overall financial performance and personnel or strategy changes. Based on the qualitative assessment, if it is determined that it is more likely than not that its fair value is less than its carrying amount, the fair value of the Company's single reporting unit is compared to its carrying value. Any excess of the goodwill carrying amount over the fair value is recognized as an impairment loss, and the carrying value of goodwill is written down to fair value. As of September 30, 2019, no goodwill impairment has been identified.

#### Redeemable convertible preferred stock

The Company records all shares of redeemable convertible preferred stock at their respective fair values on the dates of issuance, net of issuance costs. The redeemable convertible preferred stock is recorded outside of permanent equity because while it is not mandatorily redeemable, in the event of certain events considered not solely within the Company's control, such as a merger, acquisition or sale of all or substantially all of the Company's assets (each, a "deemed liquidation event"), the redeemable convertible preferred stock will become redeemable at the option of the holders of at least a majority of the then outstanding such shares. The Company has not adjusted the carrying values of the redeemable convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when a deemed liquidation event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of redeemable convertible preferred stock. Subsequent adjustments to the carrying values to the liquidation preferences will be made only when it becomes probable that such a deemed liquidation event will occur.

#### Redeemable convertible preferred stock liability

The Company's March 2018 issuance and sale of Series B redeemable convertible preferred stock was tranched into two funding dates, a first closing in March 2018, and a second closing to purchase additional shares in June

2018. The Company classified the obligation for the future purchase of additional shares under the second closing as a liability on the Company's condensed consolidated balance sheets as the obligation met the definition of a freestanding financial instrument. This redeemable convertible preferred stock tranche liability was initially recorded at a fair value of \$0.2 million on the date of issuance and was subsequently remeasured to fair value at each reporting date using Level 3 fair value inputs. Changes in the fair value of the redeemable convertible preferred stock tranche obligation of \$2.1 million were recognized as a component of other income (expense), net in the condensed consolidated statements of operations and comprehensive loss until the tranche obligation was fulfilled and extinguished upon the second closing in June 2018.

#### Revenue recognition

Effective January 1, 2018, the Company adopted Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* (ASC 606) using the full retrospective transition method. The Company did not have any effective contracts within the scope of this guidance prior to January 1, 2018. Accordingly, the Company did not elect to use any of the practical expedients permitted related to adoption, and the adoption of ASC 606 had no impact on the Company's financial position, results of operations or liquidity. Under ASC 606, the Company recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the Company expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that the Company determines are within the scope of ASC 606, the Company performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the Company satisfies a performance obligation. At contract inception, once the contract is determined to be within the scope of ASC 606, the Company assesses the goods or services promised within each contract and determines those that are performance obligations and assesses whether each promised good or service is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when (or as) the performance obligation is satisfied.

The Company enters into collaboration agreements under which it may obtain upfront license fees, research and development funding, and development, regulatory and commercial milestone payments and royalty payments. The Company's performance obligations under these arrangements may include licenses of intellectual property, sales and distribution rights, research and development services, delivery of manufactured product and/or participation on joint steering committees.

Licenses of intellectual property: If the license to the Company's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenue from upfront license fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. For licenses that are bundled with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring proportional performance for purposes of recognizing revenue from non-refundable, upfront fees. The Company evaluates the measure of proportional performance each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Research, development and regulatory milestone payments: At the inception of each arrangement that includes research, development, or regulatory milestone payments, the Company evaluates whether the milestones are considered probable of being reached and estimates the amount to be included in the transaction price. The Company uses the most likely amount method for research, development and regulatory milestone payments. Under the most likely amount method, an entity considers the single most likely amount in

a range of possible consideration amounts. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price.

Sales-based milestones and royalties: For arrangements that include sales-based milestone or royalty payments based on the level of sales, and in which the license is deemed to be the predominant item to which the sales-based milestone or royalties relate to, the Company recognizes revenue in the period in which the sales-based milestone is achieved and in the period in which the sales associated with the royalty occur. To date, the Company has not recognized any sales-based milestone or royalty revenue resulting from its collaboration arrangements.

Deferred revenue, which is a contract liability, represents amounts received by the Company in advance of the timing of revenue recognition. The current portion of deferred revenue represents the amount to be recognized as revenue within one year from the balance sheet date based on the estimated performance period of the underlying performance obligation. The noncurrent portion of deferred revenue represents amounts to be recognized as revenue after one year from the balance sheet date through the end of the performance period of the performance obligation.

#### Research and development expenditures

Research and development expenses consist of costs incurred for the Company's own and for collaborative research and development activities. Research and development costs are expensed as incurred. Research and development costs consist of salaries and benefits, including associated stock-based compensation, and laboratory supplies and facility costs, depreciation expense, amortization of intangible assets, as well as fees paid to other entities that conduct certain research and development activities on the Company's behalf. The Company estimates preclinical study and clinical trial expenses based on the services performed pursuant to contracts with research institutions and contract research organizations, or CROs, and clinical manufacturing organizations, or CMOs, that conduct and manage preclinical studies and clinical trials on the Company's behalf based on actual time and expenses incurred by them. Further, the Company accrues expenses related to clinical trials based on the level of patient activity according to the related agreement. The Company monitors patient enrollment levels and related activity to the extent reasonably possible and adjusts estimates accordingly.

## Stock-based compensation

The Company measures its stock-based awards granted to employees and directors based on the estimated fair values of the awards and recognizes the compensation over the requisite service period. The Company uses the Black-Scholes option-pricing model to estimate the fair value of its stock-based awards. Stock-based compensation is recognized on a straight-line basis over the vesting period. Stock options granted to non-employees are recorded at their fair value on the measurement date and are subject to periodic adjustments as such options vest and at the end of each reporting period, and the resulting change in fair value, if any, is recognized in the Company's condensed consolidated statements of operations and comprehensive loss during the period the related services are rendered.

#### Comprehensive loss

For the nine months ended September 30, 2018, there were no components of other comprehensive income (loss) for the Company, and comprehensive loss is the same as the net loss. For the nine months ended September 30, 2019, other comprehensive income includes net unrealized gains on marketable securities.

#### Net loss per share attributable to common stockholders

Basic net loss per share attributable to common stockholders is calculated by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period, without consideration for potentially dilutive securities. Diluted net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of common stock and potentially dilutive securities outstanding for the period. For purposes of the diluted net loss per share calculation, redeemable convertible preferred stock, stock options, common stock subject to repurchase related to unvested restricted stock awards and early exercise of stock options are considered to be potentially dilutive securities. Basic and diluted net loss attributable to common stockholders per share is presented in conformity with the two-class method required for participating securities as the redeemable convertible preferred stock is considered a participating security because it participates in dividends with common stock. The Company also considers the shares issued upon the early exercise of stock options subject to repurchase to be participating securities because holders of such shares have non-forfeitable dividend rights in the event a dividend is paid on common stock. The holders of all series of redeemable convertible preferred stock and the holders of early exercised shares subject to repurchase do not have a contractual obligation to share in the Company's losses. As such, the net loss was attributed entirely to common stockholders. Because the Company has reported a net loss for all periods presented, diluted net loss per share is the same as basic net loss per share for those periods.

#### Deferred offering costs

The Company capitalizes certain legal, accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of the equity financing, these costs are recorded in stockholders' deficit (equity) as a reduction of additional paid-in capital generated as a result of the equity financing. Should an in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the condensed consolidated statements of operations and comprehensive loss. As of September 30, 2019, \$1.3 million of deferred offering costs were capitalized in other noncurrent assets on the condensed consolidated balance sheets. There were no deferred offering costs as of December 31, 2018.

#### Segment reporting

The Company has one operating and reportable segment. The Company's chief operating decision maker, its Chief Executive Officer, manages the Company's operations on a consolidated basis for the purposes of allocating resources and evaluating financial performance. All of the Company's long-lived assets are located in the United States.

#### Recently issued and adopted accounting pronouncements

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606). Subsequently, the FASB also issued ASU No. 2015-14, Revenue from Contracts with Customers (Topic 606), which adjusted the effective date of ASU No. 2014-09; ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net), which amends the principal-versus-agent implementation guidance and illustrations in ASU No. 2014-09; ASU No. 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing, which clarifies identifying performance obligation and licensing implementation guidance and illustrations in ASU No. 2014-09; and ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients, which addresses implementation issues and is intended

to reduce the cost and complexity of applying the new revenue standard in ASU No. 2014-09 (collectively, the Revenue ASUs).

The Revenue ASUs provide an accounting standard for a single comprehensive model for use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented (the full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the modified retrospective method). On January 1, 2018, the Company early adopted ASC 606 using the full retrospective method.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities (ASU 2016-01). ASU 2016-01 enhances the reporting model for financial instruments, which includes amendments to address aspects of recognition, measurement, presentation and disclosure of financial instruments. In February 2018, the FASB issued ASU 2018-03, Technical Corrections and Improvements to Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities (ASC 2018-03). The adoption of this guidance during the year ended December 31, 2018 did not have an impact on the Company's consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-18, Restricted Cash, Statement of Cash Flows (Topic 230): Restricted Cash (ASU 2016-18). ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The adoption of this guidance during the year ended December 31, 2018 did not have a material impact on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* (ASU 2017-04). ASU 2017-04 simplifies the measurement of goodwill by eliminating step two of the two-step impairment test. Step two measures a goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. The new guidance requires an entity to compare the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. Additionally, an entity should consider income tax effects from any tax-deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. The early adoption of this guidance during the year ended December 31, 2018 did not have an impact on the Company's consolidated financial statements.

#### Recent accounting pronouncements not yet adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (ASU 2016-02). ASU 2016-02 provides accounting guidance for both lessee and lessor accounting models. The principle of ASU 2016-02 is that a lessee should recognize the assets and liabilities that arise from leases. Lessees will need to recognize a right-of-use asset and a lease liability for virtually all of their leases (other than leases that meet the definition of a short-term lease). The liability will be equal to the present value of lease payments. The asset will be based on the liability. For income statement purposes, ASU 2016-02 requires leases to be classified as either operating or finance. Operating leases will result in straight-line expense while finance leases will result in a front-loaded expense pattern. ASU 2016-02 is applicable to the Company for the fiscal year beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. In July 2018, the FASB issued supplemental adoption guidance and clarification to ASC 842 within ASU 2018-10, *Codification* 

Improvements to Topic 842, Leases, ASU 2018-11, Leases (Topic 842): Targeted Improvements and ASU 2019-01, Leases (Topic 842): Codification Improvements. ASU 2018-11 provides another transition method in addition to the existing modified retrospective transition method by allowing entities to initially apply the new leasing standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. The Company plans to adopt these ASUs on January 1, 2020. While the Company continues to review its current accounting policies and practices to identify potential differences that would result from applying the new guidance, the Company currently believes the most significant changes will be related to the recognition of new right-of-use assets and lease liabilities in the Company's consolidated balance sheet for operating leases. The Company expects to elect transitional practical expedients such that the Company will not need to reassess whether contracts are leases and will retain lease classification and initial direct costs for leases existing prior to the adoption of the new lease standard.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU 2016-13), which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model. It also eliminates the concept of other-than-temporary impairment and requires credit losses related to available-for-sale debt securities to be recorded through an allowance for credit losses rather than as a reduction in the amortized cost basis of the securities. These changes will result in earlier recognition of credit losses. In November 2018, the FASB issued ASU No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments—Credit Losses* (ASU 2018-19) which narrowed the scope and changed the effective date for non-public entities for ASU 2016-13. The FASB subsequently issued supplemental guidance within ASU No. 2019-05, *Financial Instruments—Credit Losses (Topic 326): Targeted Transition Relief* (ASU 2019-05). ASU 2019-05 provides an option to irrevocably elect the fair value option for certain financial assets previously measured at amortized cost basis. ASU 2016-13 is applicable to the Company for the fiscal year beginning after December 15, 2021. Early adoption is permitted. The Company is currently evaluating the impact the adoption of these ASUs will have on its consolidated financial statements and related disclosures.

In June 2018, the FASB issued ASU No. 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting (ASU 2018-07). ASU 2018-07 simplifies the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. ASU 2018-07 is applicable to the Company for the fiscal year beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. The Company is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurement Disclosure Framework (ASU 2018-13). ASU 2018-13 is part of a broader disclosure framework project by the FASB to improve the effectiveness of disclosures by more clearly communicating the information to the user. ASU 2018-13 is applicable to the Company for the fiscal year beginning after December 15, 2019. Early adoption is permitted. The Company is currently evaluating the impact the adoption of this ASU will have on its consolidated financial statement disclosures.

In August 2018, the FASB issued ASU No. 2018-15, Intangibles—Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (ASU 2018-15). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a cloud computing arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use-software. This ASU is effective for the Company for the fiscal year beginning after December 31, 2020, and interim periods within fiscal years

beginning after December 31, 2021. The Company is currently evaluating the impact of this ASU on the Company's consolidated financial statements.

#### 3. Fair value measurements

The following table presents information about the Company's financial assets that are measured at fair value and indicates the fair value hierarchy of the valuation:

		December 31, 2018				
	Total	Level 1	Leve	el 2	Le	vel 3
		(in thousands)				
Assets:						
Money market funds(1)	\$69,353	\$69,353	\$	_	\$	_
Contingently returnable consideration asset(2)	310	_		_		310
Total	\$69,663	\$69,353	\$	_	\$	310

		September 30, 2019						
	Total	Level 1	Level 2	Lev	vel 3			
		(in thousands)						
Assets:								
Money market funds(1)	\$ 10,817	\$10,817	\$ —	\$	_			
Commercial paper(1,3)	47,114	_	47,114		_			
U.S. government and agency securities(3)	39,193	_	39,193		_			
Corporate bonds(3)	39,943	_	39,943		_			
Total	\$137,067	\$10,817	\$126,250	\$				

- (1) Included in cash and cash equivalents on the condensed consolidated balance sheets.
- (2) Included in prepaid expenses and other current assets on the condensed consolidated balance sheets.
- (3) Included in marketable securities on the condensed consolidated balance sheets.

Money market funds are measured at fair value on a recurring basis using quoted prices. U.S. government debt securities, U.S. government agency bonds, commercial paper and corporate bonds are measured at fair value, which is derived from independent pricing sources based on quoted prices in active markets for similar securities.

The contingently returnable consideration asset relates to the fair value of the Warp Drive acquisition holdback, which was determined using an income-based approach. The key assumptions in determining the fair value are the discount rate and the probability assigned to the potential holdback. In March 2019, the events subject to the holdback occurred and the issued shares and cash were no longer subject to the holdback provision, reducing the fair value of the contingently returnable consideration asset to zero. The Company recorded \$0.3 million in research and development expense in the condensed consolidated statement of operations and comprehensive loss related to this change in fair value.

There were no transfers between Levels 1, 2 or 3 for any of the periods presented.

# 4. Marketable securities

Marketable securities are classified as available-for-sale investments and consist of the following at September 30, 2019 (in thousands):

	September 30, 2019							
	nortized cost	unre	oss alized ain	unre	oss alized oss		stimated ir value	
			(in thou	usands)				
Marketable securities:								
Commercial paper	\$ 39,322	\$	7	\$	(1)	\$	39,328	
U.S. government and agency securities	37,188		10		(5)		37,193	
Corporate bonds	37,900		44		(1)		37,943	
Total marketable securities	\$ 114,410	\$	61	\$	(7)	\$	114,464	

There were no marketable securities as of December 31, 2018.

# 5. Condensed consolidated balance sheet components

# Intangible assets, net

Intangible assets, net consist of the following as of December 31, 2018:

	Gro	Gross value		mulated rtization	bo	Net ok value	Weighted- average remaining useful life
			(in the	usands)			(in years)
In-process research and development—RAS programs	\$	55,800	\$		\$	55,800	n/a
Developed technology—tri-complex platform		7,480		(198)		7,282	6.8
Total	\$	63,280	\$	(198)	\$	63,082	

Intangible assets, net consist of the following as of September 30, 2019:

	Gro	Accumula Gross value amortizat			bo	Net ok value	Weighted- average remaining useful life
			(in th	ousands)			(in years)
In-process research and development—RAS programs	\$	55,800	\$	_	\$	55,800	n/a
Developed technology—tri-complex platform		7,480		(1,000)		6,480	6.1
Total	\$	63,280	\$	(1,000)	\$	62,280	

Amortization expense for the nine months ended September 30, 2018 and 2019 was zero and \$0.8 million, respectively.

As of September 30, 2019, future amortization expense is as follows:

	A	mount
	(in th	ousands)
Remainder of 2019	\$	267
2020		1,069
2021		1,069
2022		1,069
2023		1,069
2024		1,069
2025		868
Total	\$	6,480

# Goodwill

Goodwill consists of the following:

	Year ended December 31, 2018	Nine months ende September 30, 2019			
	(in th	(in thousands)			
Beginning balance	<del>_</del>	\$	14,608		
Goodwill acquired (Note 8)	14,608		_		
Ending balance	14,608	\$	14,608		

# Property and equipment, net

Property and equipment, net consists of the following:

	ember 31, 2018	September 30 2019	
	(in thousands)		
Laboratory equipment	\$ 6,181	\$	7,255
Leasehold improvements	3,304		3,330
Computer equipment and software	978		1,374
Furniture and fixtures	32		48
	10,495		12,007
Less: accumulated depreciation and amortization	(3,623)		(5,227)
Property and equipment, net	\$ 6,872	\$	6,780

Depreciation and amortization expense for property and equipment amounted to \$1.1 million and \$1.7 million for the nine months ended September 30, 2018 and 2019, respectively.

#### Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consist of the following:

	De	cember 31, 2018		ember 30, 2019	
		(in th			
Accrued compensation	\$	4,861	\$	2,967	
Accrued research and development		2,016		7,247	
Deferred rent, current		552		595	
Accrued professional services		264		1,353	
Capital lease, current		147		157	
Other		646		799	
Total accrued expenses and other current liabilities	\$	8,486	\$	13,118	

# 6. Commitments and contingencies

#### Operating leases

In January 2015, as amended in September 2016, the Company entered into a facility lease for office and laboratory space located in Redwood City, California (Redwood City Lease) which expires in April 2023. The landlord provided the Company with a tenant improvement allowance of \$3.4 million. The Company has assessed the tenant improvement allowance to be a lease incentive and has capitalized the full amount to property and equipment and recognized a corresponding lease financing obligation included in deferred rent on the condensed consolidated balance sheets. The lease financing obligation is amortized as an offset to rent expense over the lease term in the condensed consolidated statements of operations and comprehensive loss.

In conjunction with the lease agreement, the Company paid a security deposit of \$0.3 million which is included in other noncurrent assets on the condensed consolidated balance sheets as of December 31, 2018 and September 30, 2019.

In July 2015, as amended in March 2016 and September 2016, the Company subleased a portion of the Redwood City Lease to Pliant Therapeutics, Inc., a related party, which expired in June 2018. Sublease income of \$0.5 million for the nine months ended September 30, 2018 was recorded as an offset to rent expense in the condensed consolidated statements of operations and comprehensive loss.

As part of the Warp Drive acquisition in October 2018, the Company assumed a facility lease for office and laboratory space located in Cambridge, Massachusetts (Cambridge Lease) which expires in February 2023. In March 2019, the Company fully subleased the Cambridge Lease to Casma Therapeutics, Inc. (Casma), a related party, on financial terms substantially the same as the original lease. The sublease term with Casma is through the remainder of the Cambridge Lease term. The sublease by Casma and related sublease payments by Casma to the Company are fully guaranteed by Third Rock Ventures, LLC, a related party. Sublease income of \$0.9 million for the nine months ended September 30, 2019 was recorded as an offset to rent expense in the condensed consolidated statements of operations and comprehensive loss. In conjunction with the Cambridge Lease, the Company issued a letter of credit for \$0.2 million, which is included in restricted cash on the condensed consolidated balance sheet as of December 31, 2018 and September 30, 2019.

Rent expense for the nine months ended September 30, 2018 and 2019 was \$0.7 million and \$1.6 million, respectively, net of sublease income and tenant improvement allowance credits. The terms of the facility leases provide for rental payments on a graduated scale; however, rent expense is recognized on a straight-line basis over the lease term. As of December 31, 2018 and September 30, 2019, \$2.8 million and \$2.5 million was

included as deferred rent, respectively, which includes the deferred tenant improvement allowance and straight-line rent. The current portion of deferred rent is included in accrued expenses and other current liabilities and the noncurrent portion of deferred rent is included in deferred rent, noncurrent on the condensed consolidated balance sheets.

As of September 30, 2019, future minimum payments and receipts under the Company's operating and capital leases and sublease are as follows:

	Gross lease commitments		Sublease income		Net ease mitments
		(in tho	usands)		
Remainder of 2019	\$ 1,248	\$	(415)	\$	833
2020	3,885	(	1,701)		2,184
2021	3,786	(	1,752)		2,034
2022	3,886	(	1,804)		2,082
2023	1,003		(302)		701
Total future minimum lease payments	\$ 13,808	\$ (	5,974)	\$	7,834

Included in the amounts above are \$0.2 million of capital lease obligations.

#### Legal matters

From time to time, the Company may be involved in litigation related to claims that arise in the ordinary course of its business activities. The Company accrues for these matters when it is probable that losses will be incurred and these losses can be reasonably estimated. As of December 31, 2018 and September 30, 2019, the Company does not believe that any such matters, individually or in the aggregate, will have a material adverse effect on the Company's financial position, results of operations or cash flows.

#### Indemnification

The Company enters into standard indemnification arrangements in the ordinary course of business. Pursuant to these arrangements, the Company indemnifies, holds harmless and agrees to reimburse the indemnified parties for losses suffered or incurred by the indemnified party, in connection with any trade secret, copyright, patent or other intellectual property infringement claim by any third party with respect to its technology. The term of these indemnification agreements is generally perpetual any time after the execution of the agreement. The maximum potential amount of future payments the Company could be required to make under these arrangements is not determinable. The Company has not incurred costs to defend lawsuits or settle claims related to these indemnification agreements. As a result, the Company believes the fair value of these agreements is minimal.

#### 7. Sanofi collaboration agreement

In June 2018, the Company entered into a collaborative research, development and commercialization agreement with Aventis, Inc. (an affiliate of Sanofi), or the Sanofi Agreement, to research and develop SHP2 inhibitors, including RMC-4630 for any indications. Pursuant to the Sanofi Agreement, the Company granted Sanofi a worldwide, exclusive, sublicensable (subject to the Company's consent in certain circumstances) license under certain of the Company's patents and know-how to research, develop, manufacture, use, sell, offer for sale, import and otherwise commercialize SHP2 inhibitors, including RMC-4630, for any and all uses, subject to the Company's exercise of rights and performance obligations under the Sanofi Agreement.

In October 2018, the Company acquired Warp Drive in exchange for the Company's Series B redeemable convertible preferred stock and cash. Sanofi was a stockholder of Warp Drive and received the Company's Series B redeemable convertible preferred stock during the transaction and accordingly became an investor and related party of the Company.

Under the Sanofi Agreement, the Company received a non-refundable, upfront cash payment of \$50 million in July 2018 and could also receive up to \$520 million in development and regulatory milestone payments, including up to \$235 million upon the achievement of specified development milestones and up to \$285 million upon the achievement of certain marketing approval milestones. Sanofi also agreed to reimburse the Company for 80% of all internal and external research costs and expenses incurred under the research plan for 2019 and 2020, and for all other internal and external costs and expenses incurred to perform activities under the research and development plans for the SHP2 program. The Company is responsible for 20% of all internal and external research costs incurred under the research plan for 2019 and 2020. In the United States, the Company will share equally with Sanofi the profits and losses applicable to commercialization of SHP2 inhibitor products, pursuant to a profit/loss share agreement that the parties will negotiate based on key terms agreed in the Sanofi Agreement. On a product-by-product basis, Sanofi will also be required to pay the Company tiered royalties on annual net sales of each product outside the United States ranging from high single digit to mid-teen percentages.

The Company has primary responsibility for early clinical development of RMC-4630 pursuant to an initial development plan and also has primary responsibility for the manufacture of SHP2 inhibitors for Phase 1 and Phase 2 non-registrational clinical trials, while Sanofi is responsible for manufacturing SHP2 inhibitors for all other clinical trials and commercial supply.

Unless terminated earlier, the Sanofi Agreement will continue in effect until the later of the expiration of all of Sanofi's milestone and royalty payment obligations and the expiration of the profit/loss share agreement. Sanofi may terminate the Sanofi Agreement in its entirety or on a country-by-country or product-by-product basis for any reason or for significant safety concerns, upon prior notice to the Company. Sanofi may terminate the Sanofi Agreement in its entirety upon a change of control in the Company, with prior notice. Either party may terminate the Sanofi Agreement if an undisputed material breach by the other party is not cured within a defined period of time, or immediately upon notice for insolvency-related events of the other party. The Company may terminate the Sanofi Agreement after a certain number of years if Sanofi develops a competing program without commencing a registrational clinical trial for a SHP2 inhibitor product candidate, and subject to certain other conditions. The Company may also terminate the Sanofi Agreement at any time, if Sanofi ceases certain critical activities for SHP2 inhibitor product candidates for more than a specified period of time, provided that such cessations of critical activity were not a result of certain specified factors, and subject to certain other conditions. Upon any termination of the Sanofi Agreement with respect to any product or country, all licenses to Sanofi with respect to such product or country shall automatically terminate and all rights generally revert back to the Company.

The Company identified the following promises in the agreement (1) the license related to SHP2 inhibitors, (2) the performance of research and development services for Phase 1 clinical studies and Phase 2 clinical trials that are non-registrational clinical trials and (3) the performance of manufacturing services for the non-registrational clinical trials. The Company determined that the license is not distinct from the services within the context of the agreement because the research, development and manufacturing significantly increase the utility of the intellectual property. The intellectual property (IP) related to SHP2 inhibitors, which is proprietary to the Company, is the foundation for the research and development activities. The manufacturing services are a necessary and integral part of the research and development services as they could only be conducted utilizing the outcomes of these services. Given the research and development services under the Sanofi Agreement are expected to involve significant further development of the initial IP, the Company has

concluded that the research, development and manufacturing services are not distinct from the license, and thus the license, research and development services and manufacturing services are combined into a single performance obligation.

For revenue recognition purposes, the Company determined that the duration of the contract begins on the effective date of the Sanofi Agreement in July 2018 and ends upon completion of the non-registrational clinical trials. The contract duration is defined as the period in which parties to the contract have present enforceable rights and obligations. The Company analyzed the impact of Sanofi terminating the agreement prior to the completion of these trials and determined that there were significant economic costs to Sanofi for doing so.

The Company determined that the transaction price of the Sanofi Agreement was \$196.1 million as of September 30, 2019. In order to determine the transaction price, the Company evaluated all the payments to be received during the duration of the contract. The Company determined that the \$50.0 million upfront payment and \$146.1 million of estimated variable consideration for expense reimbursements from Sanofi for agreed upon research and development services as of September 30, 2019 constituted consideration to be included in the transaction price, which is to be allocated to the combined performance obligation. Development and regulatory milestones under the Sanofi Agreement were considered but not included in the transaction price, as it is probable that a significant revenue reversal could occur if they were included. The Company will re-evaluate the transaction price in each reporting period and as uncertain events are resolved or other changes in circumstances occur.

The license, research, development and manufacturing services are combined as one performance obligation that will be performed over the duration of the contract, which is from the effective date of the Sanofi Agreement through to the completion of studies. The Company concluded that it will utilize a cost-based input method to measure proportional performance and to calculate the corresponding amount of revenue to recognize. In applying the cost-based input method of revenue recognition, the Company uses actual costs incurred relative to estimated costs to fulfill the combined performance obligation. These costs consist primarily of internal full-time equivalent efforts and third-party costs. Revenue is recognized based on actual costs incurred as a percentage of total estimated costs as the Company completes its performance obligations. The cumulative effect of revisions to estimated costs to complete the Company's performance obligations will be recorded in the period in which changes are identified and amounts can be reasonably estimated.

During the nine months ended September 30, 2018 and 2019, the Company recognized \$9.8 million and \$38.0 million of collaboration revenue associated with this agreement, respectively. As of December 31, 2018, \$16.8 million of deferred revenue, related party is classified as current and \$28.4 million is classified as noncurrent. Revenue recognized from amounts included in deferred revenue as of December 31, 2018 was \$10.1 million during the nine months ended September 30, 2019. As of September 30, 2019, \$19.5 million of deferred revenue, related party is classified as current and \$15.6 million is classified as noncurrent.

# 8. Acquisition of Warp Drive

In October 2018, the Company acquired all outstanding shares of Warp Drive in exchange for issuing 33,079,554 shares of the Company's Series B redeemable convertible preferred stock and \$0.9 million in other consideration, for total consideration of \$69.0 million. Warp Drive was a privately held biotechnology company based in Cambridge, Massachusetts.

Warp Drive's RAS programs include compounds targeting various cancer indications, while its tri-complex platform is targeted at identifying presenter proteins for binding with small molecules and a target. Additionally, Warp Drive had a genome mining platform that is subject to a collaboration agreement with Hoffman-La Roche Ltd. (Roche) involving research in the area of neomorph antibiotics.

Pursuant to ASC Topic 805, Business Combinations, the transaction was determined to be a business combination and was accounted for using the acquisition method of accounting. The following table presents a summary of the purchase price consideration for the acquisition:

	(in th	nousands)
Series B redeemable convertible preferred stock	\$	68,144
Cash		1,172
Contingently returnable consideration asset		(310)
Total consideration	\$	69,006

The fair value of \$2.06 per share of Series B redeemable convertible preferred stock was determined using a discounted cash flow model to estimate the value of the Company's equity, and subsequently allocated to the Series B redeemable convertible preferred stock using an option pricing method.

The shares and cash issued as part of the transaction include 2,407,619 shares and less than \$0.1 million of cash subject to a holdback based on certain events associated with Warp Drive's agreement with Roche. The shares and cash subject to the holdback were issued on closing of the acquisition, but would be required to be returned to the Company if the holdback events did not occur. On the acquisition date, the Company determined the fair value of the holdback provision was \$0.3 million and recorded it as a contingently returnable consideration asset on its consolidated balance sheet. The shares subject to the holdback retained their voting rights. In March 2019, the events subject to the holdback occurred and the issued shares and cash were no longer subject to the holdback provision. See Note 3, "Fair value measurements," for a description of the determination of the fair value of the contingently returnable consideration asset.

The Company incurred \$0.4 million of acquisition-related costs as a result of the Warp Drive acquisition, which were recorded as general and administrative expenses in the consolidated statements of operations and comprehensive loss during the year ended December 31, 2018. The Company also paid \$0.6 million in transaction costs incurred by Warp Drive related to Warp Drive's advisors, which was included as part of the purchase price consideration.

The following table summarizes the fair values of the assets acquired and liabilities assumed at the acquisition date (in thousands):

	(in th	ousands)
Assets acquired:		
Cash and other current assets	\$	1,594
Property and equipment		2,151
In-process research and development—RAS programs		55,800
Developed technology—tri-complex platform		7,480
Developed technology—genome mining platform		6,100
Total assets acquired		73,125
Liabilities assumed:		
Accounts payable and other accrued liabilities		3,790
Convertible note payable, related party		2,000
Deferred revenue		745
Deferred tax liability		12,192
Total liabilities assumed		18,727
Goodwill		14,608
Total	\$	69,006

The valuations of the IPR&D—RAS programs and developed technology—genome mining platform were determined using the income approach, which discounts expected future cash flows to present value. The discount rates used were between 13% and 14%. The projected cash flows were based on key assumptions such as: estimates of revenues and operating profits related to each program or platform considering its stage of development on the acquisition date; the time and resources needed to complete the development and approval of product candidates; the life of the potential commercialized products and associated risks, including the inherent difficulties and uncertainties in developing a product candidate such as obtaining marketing approval from the FDA and other regulatory agencies; and risks related to the viability of and potential alternative treatments in any future target markets.

Intangible assets associated with acquired IPR&D relate to the RAS programs. Management determined that the estimated acquisition-date fair value of the intangible asset related to IPR&D was \$55.8 million, which was comprised of \$44.1 million related to the KRAS<sup>G12C</sup> program and \$11.7 million related to the KRAS<sup>G12D</sup> program. The KRAS<sup>G12C</sup> and KRAS<sup>G12D</sup> programs are each focused on developing inhibitors which target specific mutations of KRAS(ON) proteins. The acquired IPR&D is considered to be an indefinite-lived asset until the completion or abandonment of the research and development efforts. The acquired IPR&D will not be amortized until completion of the related products, which is determined by when the underlying programs reach technological feasibility and commence commercial production. Upon completion, the acquired IPR&D will be amortized over its useful life.

The valuation of the developed technology—tri-complex platform was based on a replacement cost approach as the Company's management intends to leverage the platform internally, but does not have the ability to assign a specific income stream to the asset. The tri-complex platform was accounted for as developed technology and is being amortized over 7 years.

The genome mining platform, including the associated Roche collaboration agreement, was accounted for as held for sale developed technology and was divested in January 2019 to Gingko Bioworks (Gingko). The Company received \$6.0 million in cash consideration from Gingko and Roche as part of the transaction, and is

entitled to receive up to 25% of future milestones earned by Gingko under the collaboration agreement with Roche included as part of this sale. The Company recognized a loss on disposal of \$0.6 million during the nine months ended September 30, 2019, which was recorded in research and development expenses in the condensed consolidated statements of operations and comprehensive loss.

The Company assumed a convertible promissory note (Convertible Note) as part of the Company's acquisition of Warp Drive. See Note 14, "Related party relationships."

Deferred revenue consists of the remaining estimated cost obligations, including mark-up, associated with the collaboration with Roche. The entire amount was recognized as collaboration revenue, other during the year ended December 31, 2018.

The Company recorded \$14.6 million in goodwill associated with this acquisition, which relates to the establishment of a deferred tax liability for the non-deductible in-process research and development intangible assets acquired and synergies resulting from the acquisition. Goodwill will not be amortized but will be tested at least annually for impairment. No impairment has been recognized as of September 30, 2019. Goodwill recorded is not deductible for income tax purposes.

## 9. Redeemable convertible preferred stock

From December 2014 to May 2017, the Company issued a total of 70,221,732 shares of Series A redeemable convertible preferred stock at a price per share of \$1.00 for proceeds of \$70.1 million, net of issuance costs.

In March and June 2018, the Company issued a total of 37,620,613 shares of Series B redeemable convertible preferred stock at a price per share of \$1.50 for proceeds of \$56.2 million, net of issuance costs. In October 2018, the Company issued 33,079,554 shares of Series B redeemable convertible preferred stock in conjunction with acquiring Warp Drive. As part of the Warp Drive acquisition, the Company assumed \$2.0 million in convertible notes payable, which was fully converted into 975,620 shares of Series B redeemable convertible preferred stock in October 2018. In November 2018, the Company issued 2,119,418 shares of Series B redeemable convertible preferred stock at a price per share of \$2.06 for proceeds of \$4.3 million, net of issuance costs.

In June and July 2019, the Company issued a total of 48,683,038 shares of Series C redeemable convertible preferred stock at a price per share of \$2.06 for proceeds of \$100.0 million, net of issuance costs.

Redeemable convertible preferred stock consists of the following:

		As of December 31, 2018				
	Shares Shares issued and Net carrying authorized outstanding value				Aggregate liquidation preference	
	(in thousands, except share data)					
Series A	70,221,732	70,221,732	\$	72,248	\$	80,641
Series B	76,000,000	73,795,205		132,833		113,492
Total	146,221,732	144,016,937	\$	205,081	\$	194,133

		As of September 30, 2019				
	Shares authorized	Shares issued and outstanding	Ne	t carrying value	lic	ggregate juidation eference
		(in thousands, except share data)				_
Series A	70,221,732	70,221,732	\$	72,248	\$	83,804
Series B	74,000,000	73,795,205		132,833		118,478
Series C	48,683,038	48,683,038		100,033		102,156
Total	192,904,770	192,699,975	\$	305,114	\$	304,438

The redeemable convertible preferred stock is recorded outside of permanent equity because while it is not mandatorily redeemable, it will become redeemable upon the occurrence of certain liquidation events that are considered not solely within the Company's control. Accordingly, the redeemable convertible preferred stock has been presented in the mezzanine section on the condensed consolidated balance sheets.

The holders of the Company's redeemable convertible preferred stock have various rights, preferences, and privileges as follows:

#### Conversion rights

Each share of redeemable convertible preferred stock shall be convertible, at the option of the holder, into such number of fully paid shares of common stock as is determined by dividing the original issue price by the conversion price in effect at the time of conversion. As of December 31, 2018 and September 30, 2019, the initial conversion price per share of redeemable convertible preferred stock is equivalent to the original issue price. The original issuance price was \$1.00 per share for the Series A redeemable convertible preferred stock, \$1.50 per share for the Series B redeemable convertible preferred stock and \$2.06 for the Series C redeemable convertible preferred stock.

The respective applicable conversion price is subject to adjustment upon any future stock splits or stock combinations, reclassifications or exchanges of similar stock, upon a reorganization, recapitalization, merger or consolidation of the Company, or upon the issuance or sale by the Company of common stock for consideration less than the applicable conversion price.

Each share of Series A, B and C redeemable convertible preferred stock automatically converts into the number of shares of common stock determined in accordance with the conversion rate upon the earlier of (a) written consent of a majority of the then outstanding shares of Series A, B and C redeemable convertible preferred stock, voting together as a single class, or (b) the closing of a public offering in which the gross cash proceeds are at least \$50.0 million and the minimum IPO price is \$2.06 per share of common stock, subject to adjustment for stock dividends, stock splits, combinations or other similar recapitalizations.

#### **Dividends**

The holders of the outstanding shares of each series of redeemable convertible preferred stock are entitled to receive, when and if declared by the Board of Directors, a cumulative cash dividend at the rate of 6% of the applicable original issue price per annum on each outstanding share of redeemable convertible preferred stock. Such dividends are payable in preference to any dividends for common stock declared by the Board of Directors. In the case of a dividend on common stock, the dividend per share of redeemable convertible preferred stock would also include the dividend payable on each share determined, if applicable, as if all redeemable convertible preferred stock had been converted to common stock. No dividends had been declared or paid to holders of redeemable convertible preferred stock as of September 30, 2019.

#### Liquidation

In the event of any liquidation, dissolution, winding up, or deemed liquidation event of the Company, either voluntary or involuntary, the holders of redeemable convertible preferred stock shall be entitled to receive pro rata, prior and in preference to any distribution to the holders of the common stock, an amount equal to the original issuance prices of each series (in each case, as adjusted for stock splits, stock dividends or distributions, recapitalizations, and similar events) and all declared but unpaid dividends, if any. If the assets and funds to be distributed among the holders of redeemable convertible preferred stock are insufficient to permit the payment to such holders, then the entire assets and funds of the Company legally available for distribution will be distributed ratably among the holders of redeemable convertible preferred stock in proportion to the preferential amount each such holder is otherwise entitled to receive.

Upon the payment of the full liquidation preference of redeemable convertible preferred stock, the remaining assets of the Company, if any, shall be distributed ratably to the holders of common stock.

#### Voting rights

Each share of redeemable convertible preferred stock has a number of votes equal to the number of shares of common stock into which it is convertible. The holders of Series A redeemable convertible preferred stock have the right to elect two members of the Company's Board of Directors. The holders of Series B redeemable convertible preferred stock have the right to elect one member of the Company's Board of Directors. The holders of common stock have the right to elect one member of the Company's Board of Directors. The holders of common stock and redeemable convertible preferred stock, voting together as a single class on an as-converted basis, are entitled to elect one member of the Board of Directors.

#### 10. Common stock

As of December 31, 2018 and September 30, 2019, the Company's certificate of incorporation authorized the Company to issue 172,000,000 shares and 249,000,000 shares of common stock, respectively, at a par value of \$0.0001 per share. Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when declared by the Board of Directors, subject to prior rights of the redeemable convertible preferred stockholders. As of September 30, 2019, no dividends have been declared to date.

The Company has reserved shares of common stock, on an as-converted basis, for future issuance as follows:

	December 31, 2018	September 30, 2019
Redeemable convertible preferred stock	146,221,732	192,904,770
Outstanding options to purchase common stock	7,945,533	22,728,675
Available for future issuance under the 2014 Equity Incentive Plan	1,953,480	5,067,205
Total	156,120,745	220,700,650

## 11. Stock-based compensation

In December 2014, the Company adopted the 2014 Equity Incentive Plan (2014 Plan). The 2014 Plan provides for the Company to issue restricted common stock, or to grant incentive stock options or nonqualified stock options for the purchase of common stock, to employees, members of the Board of Directors and consultants of the Company under terms and provisions established by the Board of Directors. The Company generally grants stock-based awards with service-based vesting conditions only. Options granted typically vest over a four-year period but may be granted with different vesting terms.

The following summarizes option activity under the 2014 Plan:

	Number of options	av	ighted- erage ise price	Weighted- average remaining contractual term	ir	gregate ntrinsic value
				(in years)	(in th	nousands)
Balance, January 1, 2019	7,945,533	\$	0.20	8.76	\$	5,085
Options granted	15,762,892	\$	0.92			
Options exercised	(832,345)	\$	0.41			
Options cancelled	(147,405)	\$	0.70			
Balance, September 30, 2019	22,728,675	\$	0.69	9.15	\$	19,563
Options vested and expected to vest as of September 30,						
2019	22,728,675	\$	0.69	9.15	\$	19,563
Options vested and exercisable as of September 30, 2019	4,767,450	\$	0.30	8.01	\$	5,973

The aggregate intrinsic values of options outstanding, exercisable, vested and expected to vest were calculated as the difference between the exercise price of the options and the estimated fair value of the Company's common stock by the Board of Directors. The intrinsic value of the options exercised for the nine months ended September 30, 2019 was \$0.3 million.

For the nine months ended September 30, 2019, the weighted-average grant-date fair value of options granted was \$0.80 per share. As of September 30, 2019, there was \$13.5 million of unrecognized stock-based compensation expense related to unvested stock options that is expected to be recognized over a weighted-average period of 3.4 years.

The total fair value of options vested during the nine months ended September 30, 2019 was \$1.2 million.

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

	Nine months ended September 30, 2019
Expected term (years)	5-6
Expected volatility	78-82%
Risk-free interest rate	1.6%-2.5%
Dividend yield	0%

Non-employee stock option awards were measured at fair value at each reporting period using a Black-Scholes option-pricing model with the following assumptions:

	Nine months ended September 30, 2019
Expected term (years)	6-10
Expected volatility	79-83%
Risk-free interest rate	1.7%-2.6%
Dividend yield	0%

The fair value of the shares of common stock underlying stock options has historically been determined by the Company's Board of Directors. Because there has been no public market for the Company's common stock, the Board of Directors has determined fair value of the common stock at the time of grant of the option by considering a number of objective and subjective factors including important developments in the Company's operations, valuations performed by an independent third party, sales of redeemable convertible preferred stock, actual operating results and financial performance, the conditions in the biotechnology industry and the economy in general, the stock price performance and volatility of comparable public companies, and the lack of liquidity of the Company's common stock, among other factors.

The Black-Scholes model assumptions that determine the fair value of stock-based awards include:

**Expected term**—The expected term represents the weighted-average period the stock options are expected to remain outstanding and is based on the options' vesting terms, contractual terms and industry peers, as the Company did not have sufficient historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior.

**Expected volatility**—Since the Company is privately held and does not have any trading history for its common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded biotechnology companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, stage in the life cycle or area of specialty.

**Risk-free interest rate**—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of option.

**Expected dividend**—The Company has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, the Company used an expected dividend yield of zero.

Total stock-based compensation expense by function was as follows:

	 Nine months ended September 30,			
	2018			
	(in thousands)			
Research and development	\$ 380	\$	941	
General and administrative	194		822	
Total	\$ 574	\$	1,763	

Stock-based compensation related to options granted to non-employees was \$0.2 million and \$0.3 million for the nine months ended September 30, 2018 and 2019, respectively.

The Company allows its employees, non-employees and directors to exercise options granted under the 2014 Plan prior to vesting. The shares related to early exercised stock options are subject to the Company's lapsing repurchase right upon termination of employment at the original purchase price. In order to vest, the holders are required to provide continued service to the Company. The proceeds are initially recorded in other noncurrent liabilities and are reclassified to common stock and additional paid-in capital as the repurchase right lapses. As of December 31, 2018 and September 30, 2019, there were 2,996,264 and 2,067,023 shares, respectively, and \$0.3 million and \$0.4 million, respectively, recorded in other noncurrent liabilities, related to early exercised shares that were subject to repurchase.

#### 12. Income taxes

No provision for income taxes was recorded for the nine months ended September 30, 2018 and 2019. The Company has incurred net pre-tax losses in the United States only for all periods presented. The Company has not reflected any benefit of such net operating loss carryforwards in the accompanying condensed consolidated financial statements.

During the nine months ended September 30, 2019, there were no material changes to the Company's unrecognized tax benefits, and the Company does not expect to have any significant changes to unrecognized tax benefits through the end of the fiscal year. Because of the Company's history of tax losses, all years remain open to tax audit.

## 13. Net loss per share attributable to common stockholders and unaudited pro forma net loss per share

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

	Nine months ended September 30,		
	 2018 201		
	(in thousands, except share and po share data)		
Numerator:			
Net loss	\$ (30,450)	\$	(33,068)
Redeemable convertible preferred stock dividends-undeclared and cumulative	(4,512)		(9,987)
Net loss attributable to common stockholders	\$ (34,962)	\$	(43,055)
Denominator:			
Weighted-average shares outstanding	15,098,684		15,619,214
Less: Weighted-average unvested restricted shares and shares subject to repurchase	(4,309,873)		(2,366,194)
Weighted-average shares used to compute net loss per share attributable to common stockholders-basic and diluted	10,788,811		13,253,020
Net loss per share attributable to common stockholders-basic and diluted	\$ (3.24)	\$	(3.25)

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

	Septemb	er 30,
	2018	2019
Redeemable convertible preferred stock	107,842,345	192,699,975
Options to purchase common stock	8,724,039	22,728,675
Options early exercised subject to future vesting	4,021,129	2,067,023
Restricted stock subject to future vesting	86,458	_
	120,673,971	217,495,673

#### Pro forma net loss per share

The following table sets forth the computation of pro forma basic and diluted net loss per share for the nine months ended September 30, 2019:

	Nine months ender September 30, 2019 (in thousands, except share and per share data)	
Numerator:		
Net loss attributable to common stockholders	\$	(43,055)
Adjust: Redeemable convertible preferred stock dividends-undeclared and cumulative		9,987
Pro forma net loss	\$	(33,068)
Denominator:		
Weighted-average shares used to compute net loss per share attributable to common stockholders-basic		
and diluted		13,253,020
Pro forma adjustment to reflect conversion of redeemable convertible preferred stock		164,228,835
Weighted-average shares used to compute pro forma net loss per share-basic and diluted		177,481,855
Pro forma net loss per share-basic and diluted	\$	(0.19)

## 14. Related party relationships

In October 2018, the Company acquired all outstanding shares of Warp Drive Bio, Inc., or Warp Drive. In connection with the acquisition, the Company issued 33,079,554 shares of Series B redeemable convertible preferred stock (the Acquisition Shares). Of the Acquisition Shares, 8,315,308 shares of Series B redeemable convertible preferred stock were issued to entities affiliated with Third Rock Ventures, a related party. In addition, Alexis Borisy, who is currently a member of the Company's board of directors and was a member of the Company's board of directors at the time of the acquisition of Warp Drive, was then an affiliate of Third Rock Ventures. Of the Acquisition Shares, 16,364,939 shares of Series B redeemable convertible preferred stock were issued to Sanofi, which became a related party following the acquisition. See Note 7, "Sanofi collaboration agreement," for a discussion of the Sanofi collaboration agreement.

In connection with the Company's acquisition of Warp Drive, the Company assumed a Convertible Note issued by Warp Drive to an entity affiliated with Third Rock Ventures, dated October 8, 2018. The Convertible Note was issued in a principal amount of \$2.0 million, with interest at an annual rate of 8% computed on the basis of a 360-day year. On October 30, 2018, at the Company's election, the Company converted the Convertible Note into 975,620 shares of Series B redeemable convertible preferred stock which were issued to an entity affiliated with Third Rock Ventures pursuant to the terms of the Convertible Note.

Following the Company's acquisition of Warp Drive, in January 2019, the Company entered into a sublease agreement with Casma to sublease the Cambridge Lease. The sublease by Casma and related sublease payments by Casma to the Company are fully guaranteed by an affiliate of Third Rock Ventures.

From July 2015 to June 2018, the Company subleased a portion of its Redwood City Lease to Pliant Therapeutics, Inc., an entity affiliated with Third Rock Ventures.

In connection with the Company's obligations and responsibilities under the Sanofi Agreement, in April 2019, the Company entered into a Clinical Supply Agreement with Genzyme Corporation, or Genzyme, an affiliate of

Sanofi, and a Quality Agreement with Sanofi-Aventis Recherche & Developpement, an affiliate of Sanofi. The Quality Agreement was amended in December 2019. Sanofi was a related party at the time both agreements were entered into. The Clinical Supply Agreement governs how the Company will oversee the manufacture and supply of any SHP2 inhibitors requested by Genzyme for use in its clinical development activities under the Sanofi Agreement and provides that Genzyme will compensate the Company for the costs to manufacture any such product plus a 10% fee. The Quality Agreement requires that the production of RMC-4630 meets certain quality standards and puts certain conditions on the Company's arrangements with subcontractors. The Quality Agreement does not contemplate that any consideration be paid separate from the Sanofi Agreement.

#### 15. Subsequent events

Subsequent events have been evaluated through January 10, 2020, which is the date that these condensed consolidated financial statements were available to be issued.

In November 2019, the Company entered into a clinical trial collaboration agreement with Amgen, Inc. (Amgen) to evaluate the combination of the Company's SHP2 inhibitor, RMC-4630, with Amgen's KRAS<sup>G12C</sup> inhibitor, AMG 510, in a clinical study. Amgen will be responsible for conducting the clinical study at their cost. The Company will be responsible for providing Amgen with clinical supply of RMC-4630 for the planned study.

In December 2019, the Company granted options to purchase 1,348,025 shares of common stock with an exercise price of \$1.54.

## **Report of Independent Auditors**

To the Board of Directors of Warp Drive Bio, Inc.:

We have audited the accompanying financial statements of Warp Drive Bio, Inc., which comprise the balance sheet as of December 31, 2017, and the related statements of operations and comprehensive loss, of convertible preferred stock and stockholders' deficit and of cash flows for the year then ended.

## Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

## **Auditors' Responsibility**

Our responsibility is to express an opinion on the financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Warp Drive Bio, Inc. as of December 31, 2017, and the results of its operations and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### **Emphasis of Matter**

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has suffered recurring losses, will require additional financing to fund future operations, and has stated that substantial doubt exists about the Company's ability to continue as a going concern. Management's evaluation of the events and conditions and management's plans regarding these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to this matter.

/s/ PricewaterhouseCoopers LLP Boston, Massachusetts October 16, 2018

## **Report of Independent Auditors**

The Board of Directors Warp Drive Bio, Inc.

We have audited the accompanying financial statements of Warp Drive Bio, Inc. (the Company), which comprise the balance sheet as of December 31, 2016, and the related statements of operations and comprehensive loss, changes in stockholders' (deficit) equity and cash flows for the year then ended, and the related notes to the financial statements.

## Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in conformity with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error.

## **Auditor's Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Warp Drive Bio, Inc. at December 31, 2016, and the results of its operations and its cash flows for the year then ended in conformity with U.S. generally accepted accounting principles.

## The Company's Ability to Continue as a Going Concern

The accompanying financial statements for the year ended December 31, 2016 have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company's recurring use of cash to fund operations, recurring losses and net capital deficiency raise substantial doubt about its ability to continue as a going concern. Management's plans in regard these matters are also discussed in Note 1 to the financial statements. The accompanying financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to this matter.

/s/ Ernst & Young LLP Boston, MA June 30, 2017, except for Notes 7, 8 and 13, as to which the date is September 19, 2019

# Warp Drive Bio, Inc. Balance sheets

	Decem	ber 31,
	2017	2016
Assets		
Current assets		
Cash and cash equivalents	\$ 18,616,527	\$ 2,173,765
Prepaid expenses and other current assets	527,558	543,802
Total current assets	19,144,085	2,717,567
Property and equipment, net	4,008,581	5,438,180
Restricted cash	213,581	320,261
Total assets	\$ 23,366,247	\$ 8,476,008
Liabilities, Convertible Preferred Stock and Stockholders' Deficit		
Current liabilities		
Accounts payable	\$ 1,816,045	\$ 1,296,483
Accrued expenses	2,159,209	1,854,562
Current portion of capital lease	114,866	· · · · —
Current portion of deferred revenue	5,482,353	663,201
Current portion of deferred rent	107,783	815,991
Total current liabilities	9,680,256	4,630,237
Convertible Notes payable, related party	33,989,320	22,055,057
Capital lease, less current portion	301,364	_
Deferred revenue, less current portion	17,250,000	2,228,174
Deferred rent, less current portion	255,067	143,494
Total liabilities	61,476,007	29,056,962
Commitments and contingencies (Note 10)		
Convertible preferred stock		
Series A convertible preferred stock, \$0.001 par value; 75,000,000 shares authorized, issued		
and outstanding at December 31, 2017 and 2016; aggregate liquidation preference of		
\$99,983,111 and \$93,983,111 at December 31, 2017 and 2016, respectively (Note 8)	74,259,411	74,259,411
Stockholders' deficit		
Common stock, \$0.001 par value; 121,500,000 shares authorized, 19,083,561 and 21,254,788		
shares issued and outstanding at December 31, 2017 and 2016, respectively	19,084	21,255
Additional paid-in capital	5,088,905	4,447,929
Accumulated deficit	(117,477,160)	(99,309,549)
Total stockholders' deficit	(112,369,171)	(94,840,365)
Total liabilities, convertible preferred stock and stockholders' deficit	\$ 23,366,247	\$ 8,476,008

# Warp Drive Bio, Inc. Statements of operations and comprehensive loss

	Year ended l	December 31,
	2017	2016
Revenue		
Collaboration revenue, related party	\$ 13,009,022	\$ 1,858,625
Collaboration revenue	1,150,000	_
Grant revenue	1,671,881	_
Total revenue	15,830,903	1,858,625
Operating expenses		
Research and development	23,584,888	20,192,431
General and administrative	7,524,205	8,034,661
Total operating expenses	31,109,093	28,227,092
Loss from operations	(15,278,190)	(26,368,467)
Interest and other income	45,111	18,747
Interest expense	(2,934,532)	(1,062,213)
Net loss and comprehensive loss	\$ (18,167,611)	\$ (27,411,933)

# Warp Drive Bio, Inc. Statements of convertible preferred stock and stockholders' deficit

	Series A pre		Serio convertible sto	preferred	Common	stock	Capital i	nterests	Additional		Total
	Units	Amount	Shares	Amount	Units/ Shares	Amount	Units	Amount	paid-in capital	Accumulated deficit	stockholders' deficit
Balances at January 1, 2016	75,000,000	\$ 74,259,411	_	\$ —	1,323,530	\$ 1,324	17,155,708	\$ 3,454,622	\$ —	\$ (71,897,616)	\$ (68,441,670)
Effect of restructuring (Note 8)	(75,000,000)	(74,259,411)	75,000,000	74,259,411	17,155,708	17,156	(17,155,708)	(3,454,622)	3,437,466	_	_
Issuance of restricted stock	_	_	_	_	3,742,345	3.742	_	_	33.681	_	37.423
Cancellation of unvested restricted					5,. 12,5 15	5,			55,557		.,,
stock	_	_	_	_	(966,795)	(967)	_	_	(8,701)	_	(9,668)
Stock-based compensation Net loss	_	_	_	_	_	_	_	_	985,483	(27,411,933)	985,483 (27,411,933)
Balances at December 31,											
2016 Issuance of	_	\$ —	75,000,000	\$74,259,411	21,254,788	\$21,255	_	\$ —	\$4,447,929	\$ (99,309,549)	\$ (94,840,365)
restricted stock	_	_	_	_	1,107,150	1,107	_	_	9,965	_	11,072
Cancellation of unvested restricted											
stock	_	_	_	_	(3,278,377)	(3,278)	_	_	(9,467)	_	(12,745)
Stock-based compensation Net loss	_	_	_	_	_	_	_	_	640,478	(18,167,611)	640,478 (18,167,611)
Balance at December 31, 2017	_	s –	75 000 000	\$74,259,411	19.083.561	\$ 19,084	_	s —	\$5.088.905		\$ (112,369,171)

## Warp Drive Bio, Inc. Statements of cash flows

		Year ended December 31,			
		2017		2016	
Operating activities					
Net loss	\$	(18,167,611)	\$	(27,411,933)	
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:					
Noncash interest expense		2,934,532		1,062,213	
Stock-based compensation		640,478		985,483	
Gain on sale of property and equipment		_		(12,138)	
Depreciation and amortization		2,497,208		2,367,426	
Changes in operating assets and liabilities					
Prepaid expenses and other current assets		45,240		(57,482)	
Accounts payable		772,994		71,977	
Accrued expenses		304,647		(562,992)	
Deferred revenue		19,840,978		2,891,375	
Deferred rent	<u> </u>	(596,635)		(777,190)	
Net cash provided by (used in) operating activities		8,271,831		(21,443,261)	
Investing activities					
Change in restricted cash		106,754		_	
Purchases of property and equipment		(933,881)		(2,071,413)	
Proceeds from sale of property and equipment		_		40,000	
Net cash used in investing activities		(827,127)		(2,031,413)	
Financing activities					
Proceeds from the issuance of restricted stock		11,072		37,423	
Repurchase of unvested restricted stock		(12,745)		(9,668)	
Proceeds from convertible notes payable with related party		8,999,731		17,451,965	
Net cash provided by financing activities		8,998,058		17,479,720	
Net increase (decrease) in cash and cash equivalents	_	16,442,762		(5,994,954)	
Cash and cash equivalents				(0,00.,00.)	
Beginning of year		2,173,765		8,168,719	
End of year	\$	18,616,527	\$	2,173,765	
Supplemental disclosure of noncash activities	Ψ_	10,010,021	Ψ	2,170,700	
	\$	23.636	\$	277,068	
Equipment purchases included in accounts payable Equipment purchases under capital lease	Ф	23,636 416.230	Φ	211,000	
Equipment purchases under capital lease		410,230		_	

## Warp Drive Bio, Inc. Notes to the financial statements

## 1. Organization and basis of presentation

Warp Drive Bio, Inc. (the "Company") operates on the core principle that nature is the most powerful inventor of new drugs, unconstrained by the boundaries of modern science. The Company is deploying innovative Small Molecule-Assisted Receptor Targeting (SMART™) and Genomic Mining / antibiotic platforms to discover new medicines that have the potential to make a significant difference in the lives of patients. The Company was launched in 2011 through a partnership with Sanofi and with financing from Third Rock Ventures and Greylock Partners.

In January 2016, the Company amended the Limited Liability Company Agreement with its preferred shareholders and restructured the Company as a C Corporation after a series of mergers with certain affiliates in a tax-free manner. The Company's shareholders stayed predominantly the same after these transactions.

The Company is subject to a number of risks similar to other life science companies including, but not limited to, raising additional capital, development by its competitors of new technological innovations, protection of proprietary technology, and market acceptance of the Company's products.

#### Liquidity

The Company's financial statements have been prepared on the basis of continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the ordinary course of business. The Company has primarily funded its operations with proceeds from the sales of preferred units and milestones achieved as a result of collaboration arrangements. The Company has incurred losses since its inception, including net losses of approximately \$18.2 million and \$27.4 million for the years ended December 31, 2017 and 2016. As of December 31, 2017, the Company had an accumulated deficit of approximately \$117.5 million. The Company expects that its operating losses will continue for the foreseeable future. As of October 16, 2018, the issuance date of the financial statements for the year ended December 31, 2017, the Company expects that its cash and cash equivalents will not be sufficient to fund its operating expenses and capital expenditure requirements for at least the next 12 months from the date that the financial statements are issued. The future viability of the Company is dependent on its ability to raise additional capital to finance its operations. These conditions raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued.

Management's plans to alleviate these conditions that raise substantial doubt regarding the Company's ability to continue as a going concern include pursuing one or more of the following steps to raise additional funding, none of which can be guaranteed or are entirely within the Company's control:

- · Sell Company's stock in private equity financings.
- · Earn milestones payments under the Company's collaboration with Roche. See Note 4.

There can be no assurance, however, that the Company will receive cash proceeds from any of these potential resources or, to the extent cash proceeds are received, those proceeds would be sufficient to support the Company's operations for at least the next year following the date that the financial statements are issued. Management has concluded the likelihood that its plan to obtain sufficient funding from one or more of these sources will be successful, while reasonably possible, is less than probable. Accordingly, management has concluded that substantial doubt exists regarding the Company's ability to continue as a going concern.

## 2. Summary of significant accounting policies

#### Use of estimates

The presentation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenue and expenses during the reporting period.

#### Patent costs

The Company expenses patent and related legal costs as incurred as general and administrative expenses in the statements of operations and comprehensive loss.

#### Comprehensive loss

Comprehensive loss is comprised of net loss and other comprehensive income (loss), if any. For the years ended December 31, 2017 and 2016, comprehensive loss was equal to net loss.

#### Cash and cash equivalents

Cash equivalents are short-term, highly liquid investments that are readily convertible into cash, with original maturities of three months or less.

#### Restricted cash

As of December 31, 2017 and 2016, the Company has \$213,581 and \$320,261, respectively, of long-term restricted cash related to deposits with a financial institution, which are used to collateralize letters of credit issued to the landlord of the Company's leased facility (Note 10). During the year ended December 31, 2017, the Company reduced its restricted cash by \$106,754 in accordance with the Company's facility lease.

#### Property and equipment

Property and equipment are stated at cost and are depreciated over their estimated useful lives using the straight-line method. Expenditures for maintenance and repairs are recorded to expense as incurred, whereas major improvements are capitalized as additions to property and equipment. Amortization of capital leases are included in depreciation expense. The Company reviews its property and equipment whenever events or changes in circumstances indicate that the carrying value of certain assets might not be recoverable, and recognizes an impairment loss when it is probable that an asset's realizable value is less than the carrying value. To date, no such impairment losses have been recorded.

## Fair value of financial instruments

Financial Accounting Standards Board Accounting Standards Codification (ASC) 825, Financial Instruments, requires disclosure of the fair value of financial instruments. For financial instruments including cash equivalents, accounts payable and accrued expenses, the carrying amount approximates fair value due to their short-term nature.

The Company believes that its debt obligations bear interest at rates which approximate prevailing market rates for instruments with similar characteristics and, accordingly, the carrying values for these instruments approximate fair value. The debt fair value measurements are considered Level 2 in the fair value hierarchy.

#### Fair value measurements

ASC 820, Fair Value Measurements and Disclosures (ASC 820), defines fair value and establishes a framework for measuring fair value in accordance with GAAP and expands disclosures about fair value measurements. ASC 820 codifies the definition of fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, clarifies the principle that fair value should be based on the assumptions market participants would use when pricing the asset or liability, and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date.

Fair value measurements are classified and disclosed in one of the following three categories:

Level 1 Quoted prices in active markets for identical assets or liabilities.

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of assets or liabilities.

The Company measures the following financial assets at fair value on a recurring basis. The fair value of these assets was determined as follows at December 31, 2017 and 2016:

	Balance at December 31, 2017	Quoted p active m for ide asse (leve	arkets ntical ets	ot obse in	ificant ther ervable puts vel 2)	unob: in	nificant servable puts vel 3)
Assets							
Money market funds	\$ 18,411,704	\$ 18,	411,704	\$	_	\$	_
Cash equivalents	\$ 18,411,704	\$ 18,	411,704	\$	_	\$	_
							,

	alance at ember 31, 2016	act	oted prices in live markets or identical assets (level 1)	of obse in	ificant ther ervable puts vel 2)	unobs in	ificant servable outs vel 3)
Assets							
Money market funds	\$ 2,072,164	\$	2,072,164	\$	_	\$	
Cash equivalents	\$ 2,072,164	\$	2,072,164	\$	_	\$	

In 2018, the Company identified an error in the amount of cash equivalents, specifically money market funds, reported in its 2016 leveling disclosures which resulted in an understatement of money market funds balances of \$2,036,577 at December 31, 2016 and an offsetting overstatement of its cash balance presentation in the leveling table. In accordance with accounting guidance in ASC 250, the Company concluded that this error was not material to the previously issued financials statements. The disclosure has been revised to reflect the corrected money market funds balance of the Company, as follows:

		ecember 31, 201	6
	As reported	Adjustment	As revised
Money market funds	\$ 35,587	\$ 2,036,577	\$2,072,164

In addition, cash balances were removed from the leveling table. The revisions had no impact to the previously reported Balance Sheets, Statements of Operations and Comprehensive Loss, Statements of Convertible Preferred Stock and Stockholders' Deficit or the Statements of Cash Flows.

#### Revenue recognition

#### Collaboration revenue

Beginning on October 5, 2017, the Company has earned revenue under the research collaboration with F. Hoffman-La Roche Limited and Hoffman-La Roche Inc. (Roche) concentrated on the development of drug candidates from novel natural products with antibiotic properties called Neomorphs.

Beginning on January 8, 2016, the Company has earned revenue under the research collaboration with Sanofi Research Invest, LLC (Sanofi), a large shareholder, in which the Company granted an exclusive license focused on the development of drugs targeting important human oncogenes.

See Note 4 regarding the notice of termination of this collaboration during the year ended December 31, 2017.

The Company recognizes revenue in accordance with ASC Topic 605, Revenue Recognition (ASC 605). Accordingly, revenue is recognized for each unit of accounting when all of the following criteria are met:

- · Persuasive evidence of an arrangement exists;
- · Delivery has occurred or services have been rendered;
- · The seller's price to the buyer is fixed or determinable; and
- · Collectability is reasonably assured.

Amounts received prior to satisfying the revenue recognition criteria are recorded as deferred revenue. Amounts expected to be recognized as revenue within the 12 months following the balance sheet date are classified in current liabilities. Amounts not expected to be recognized as revenue within the 12 months following the balance sheet date are classified as deferred revenue, less current portion.

The Company evaluates multiple—element arrangements based on the guidance in ASC Topic 605—25, Revenue Recognition Multiple—Element Arrangements (ASC 605—25). Pursuant to the guidance in ASC 605—25, the Company evaluates multiple—element arrangements to determine (1) the deliverables included in the arrangement and (2) whether the individual deliverables represent separate units of accounting or whether they must be accounted for as a combined unit of accounting. This evaluation involves subjective determinations and requires the Company to make judgments about the individual deliverables and whether such deliverables are separable from the other aspects of the contractual relationship. Deliverables are considered separate units of accounting provided that the delivered item has value to the customer on a standalone basis and, if the arrangement includes a general right of return relative to the delivered item,

delivery or performance of the undelivered item is considered probable and substantially in the Company's control. In assessing whether an item has standalone value, the Company considers factors such as the research, development, manufacturing and commercialization capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, the Company considers whether the collaboration partner can use a deliverable for its intended purpose without the receipt of the remaining deliverable, whether the value of the deliverable is dependent on the undelivered item and whether there are other vendors that can provide the undelivered items.

The consideration received under the arrangement that is fixed or determinable is then allocated among the separate units of accounting using the relative selling price method. The Company determines the estimated selling price for units of accounting within each arrangement using vendor—specific objective evidence (VSOE) of selling price, if available, third—party evidence (TPE) of selling price if VSOE is not available, or best estimate of selling price (BESP) if neither VSOE nor TPE is available. Determining the BESP for a unit of accounting requires significant judgment. In developing the BESP for a unit of accounting, the Company considers applicable market conditions and relevant entity—specific factors, including factors that were contemplated in negotiating the agreement with the customer and estimated costs. The Company validates the BESP for units of accounting by evaluating whether changes in the key assumptions used to determine the BESP will have a significant effect on the allocation of arrangement consideration between multiple units of accounting.

The Company recognizes arrangement consideration allocated to each unit of accounting when all of the revenue recognition criteria in ASC 605 are satisfied for that particular unit of accounting. In the event that a deliverable does not represent a separate unit of accounting, the Company recognizes revenue from the combined unit of accounting over the Company's contractual or estimated performance period for the undelivered elements, which is typically the term of the Company's research and development obligations. If there is no discernible pattern of performance or objectively measurable performance measures do not exist, then the Company recognizes revenue under the arrangement on a straight—line basis over the period the Company is expected to complete its performance obligations.

At the inception of an arrangement that includes milestone payments, the Company evaluates whether each milestone is substantive and at risk to both parties on the basis of the contingent nature of the milestone. This evaluation includes an assessment of whether: (1) the consideration is commensurate with either the Company's performance to achieve the milestone or the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from its performance to achieve the milestone, (2) the consideration relates solely to past performance and (3) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. The Company evaluates factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone and the level of effort and investment required to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether a milestone satisfies all of the criteria required to conclude that a milestone is substantive. Milestones that are not considered substantive are recognized as earned if here are no remaining performance obligations or over the remaining period of performance, assuming all other revenue recognition criteria are met. The Company uses the cumulative catch-up approach.

The Company will recognize royalty revenue in the period of sale of the related product(s), based on the underlying contract terms, provided that the reported sales are reliably measurable and the Company has no remaining performance obligations, assuming all other revenue recognition criteria are met.

The Company follows the accounting guidance in ASC 808 Collaborations for collaborative arrangements which require that certain transactions between collaborators be recorded in the Statement of Operations and Comprehensive Loss on either a gross or net basis, depending on the characteristics of the collaboration relationship, and provides for enhanced disclosure of collaborative relationships. The Company accounts for

collaborations within the scope of ASC 808 when both parties are actively participating and exposed to significant risks and rewards. The ASC 808 guidance is specific to presentation and disclosure and does not address recognition and measurement. The Company evaluated its collaborative agreements for proper classification in the Statement of Operations and Comprehensive Loss based on the nature of the underlying activity.

If payments to and from collaborative partners are not within the scope of other authoritative literature, the classification in the Statement of Operations and Comprehensive Loss for the payments is based on a reasonable, rational analogy to authoritative accounting that is applied in a consistent manner. Payments and services are reviewed in order to determine if gross or net presentation is appropriate.

#### Grant revenue

The Company has concluded to recognize funding received from antibiotic grants from the Gates Foundation, the Cystic Fibrosis Foundation and the Small Business Innovative Research program as revenue, rather than as a reduction of research and development expenses, because the Company is the principal in conducting the research and development activities and these contracts are central to its Neomorph antibiotic ongoing operations. Revenue is recognized as the qualifying expenses related to the contracts are incurred and at times approved by the counter- party. Revenue recognition commences only once persuasive evidence of a contract exists, services have been rendered, the reimbursement amounts under the contract are fixed or determinable and approved by the counter party, and collectability is reasonably assured.

#### Research and development costs

Expenditures relating to research and development are expensed in the period incurred. R&D costs consist of compensation and benefits (including stock-based compensation) for R&D employees, an allocation of facility expenses, overhead expenses, fees paid to contract research organizations (CROs) and other outside expenses.

#### General and administrative costs

General and administrative costs primarily costs of compensation and benefits (including stock- based compensation) of executive, human resources, and finance employees. Other costs include facility costs not otherwise included in research and development expense, and professional fees for legal and accounting services. General and administrative expense also consists of the costs of maintaining the Company's intellectual property.

#### Income taxes

In January 2016, the Company amended the Limited Liability Company Agreement with its preferred shareholders and restructured the Company as a C Corporation after a series of mergers with certain affiliates in a tax-free manner. The holders of common units received an equivalent number of common stock.

The Company uses the liability method to account for income taxes. Deferred tax assets and liabilities are determined based on differences between financial reporting and income tax basis of assets and liabilities, as well as net operating loss and tax credit carryforwards, and are measured using the enacted tax rates and laws that will be in effect when the differences reverse. Deferred tax assets are reduced by a valuation allowance to reflect the uncertainty associated with their ultimate realization. The effect of a change in tax rate on deferred taxes is recognized in income or loss in the period that includes the enactment date.

The Company uses its judgment for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The Company recognizes any material interest and penalties related to unrecognized tax benefits in income tax expense.

#### Concentrations of credit risk and off-balance sheet risk

The Company has no significant off-balance sheet risk such as foreign exchange contracts, option contracts, or other foreign hedging arrangements. Financial instruments that potentially expose the Company to concentrations of credit risk primarily consist of cash held in traditional bank accounts. At December 31, 2017, the Company's cash was deposited with a large financial institution and, accordingly, the Company believes such funds are subject to minimal credit risk. The Company invests its cash equivalents in highly rated money market funds.

#### Stock-based compensation

The Company accounts for stock-based compensation awards in accordance with ASC Topic 718, Compensation—Stock Compensation (ASC 718). ASC 718 requires all share-based payments to employees, including unvested restricted stock, to be recognized as expense in the statements of operations based on their grant date fair values. In January 2016, the Company amended the Limited Liability Company Agreement with its preferred shareholders and restructured the Company as a C Corporation. In 2016 as a C Corporation, the Company granted unvested restricted stock to employees and members of the Board of Directors. Stock-based compensation for restricted stock issued for consideration less than the fair market value is recognized over the vesting period on a straight-line basis.

Share-based payments issued to nonemployees are initially recorded at their fair values, and are revalued at each reporting date and as the equity instruments vest and are recognized as expense over the related service period in accordance with the provisions of ASC Topic 505-50, Equity-Based Payments to Non Employees. During the year ended December 31, 2017, 25,000 unvested restricted stock was granted to nonemployees. During the year ended December 31, 2016, no unvested restricted stock was granted to nonemployees. Stock-based compensation costs for nonemployee awards is recognized as services are provided, which is generally the vesting period, on a straight-line basis. The unvested portion of the restricted stock is subject to remeasurement over the vesting period.

In January 2016, the Company amended the Limited Liability Company Agreement with its preferred shareholders and restructured the Company as a C Corporation after a series of mergers with certain affiliates in a tax-free manner. The holders of common units and capital interests received an equivalent number of common stock with the same vesting provisions as the original awards.

The Company has utilized significant estimates and assumptions in determining the fair value of its common stock and common units. The Board of Directors determined the estimated fair value of the Company's common stock based on a number of objective and subjective factors, including the lack of an active public market for the Company's common and convertible preferred stock; the prices of shares of the Company's convertible preferred stock that the Company had sold to outside investors in arm's length transactions, and the rights, preferences, and privileges of that convertible preferred stock relative to the Company's common stock; the Company's results of operations and financial condition; the Company's entry into collaboration agreements; the material risks related to the Company's business; the Company's business strategy; the market performance of publicly traded companies in the life sciences and biotechnology sectors; and the likelihood of achieving a liquidity event for the holders of the Company's common stock, such as an initial public offering (IPO), given prevailing market conditions. Significant changes to the key assumptions used in the valuations could have resulted in different fair values of the Company's common stock at each valuation date.

#### Recent accounting pronouncements

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standard Update, or ASU, No. 2014-9, Revenue from Contracts with Customers, or ASU No. 2014-9, which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the Company expects to receive for those goods or services. The update also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for private companies for annual reporting periods beginning after December 15, 2018 and should be applied retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying this update recognized at the date of initial application. The Company is currently evaluating the impact of the adoption of this standard on its financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases. This standard amends the existing guidance to require lessees to present most leases on their balance sheets and recognize corresponding expenses on their statements of operations. It is effective for annual reporting periods beginning after December 15, 2019, but early adoption is permitted. The Company is currently evaluating the impact that this standard will have on its financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting, or ASU No. 2016-09, which simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification of cash flows. ASU No. 2016-09 is effective for annual periods beginning after December 15, 2017. The Company is currently evaluating the impact that this standard will have on its financial statements.

In November 2016, FASB issued ASU No. 2016-18, Statement of Cash Flows, Restricted Cash, or ASU No. 2016-18. ASU No. 2016-18 provides guidance on the presentation of restricted cash and restricted cash equivalents in the statement of cash flows. Under ASU No. 2016-18, the statement of cash flows shall explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Amounts generally described as restricted cash and cash equivalents should now be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period amounts shown on the statements of cash flows. The amendments of this ASU are effective for reporting periods beginning after December 15, 2017, with early adoption permitted. Other than the revised statement of cash flows presentation, the adoption of ASU No. 2016-18 will not have an impact on the Company's financial statements.

### 3. Property and equipment

	Useful life	2017	2016
Lab equipment	5 years	\$ 8,971,721	\$ 8,039,013
Computer equipment and software	3 years	738,132	603,231
Office furniture	5 years	129,460	129,460
Leasehold improvements	Lesser of useful life or lease term	4,827,801	4,827,801
Total property and equipment, at cost		14,667,114	13,599,505
Accumulated depreciation and amortization		(10,658,533)	(8,161,325)
Property and equipment, net		\$ 4,008,581	\$ 5,438,180

The Company has leases for lab equipment that meets the criteria to be accounted for as a capital lease. As of December 31, 2017 and 2016, lab equipment under capital leases totaled \$1,088,588 and \$701,427, respectively. Accumulated depreciation on such equipment totaled \$701,427 as of December 31, 2017 and 2016.

The Company incurred depreciation and amortization expense of \$2,497,208 and \$2,367,426 for the years ended December 31, 2017 and 2016, respectively.

#### 4. Collaborations

#### A. Summary of Roche Collaboration

#### Overall

In October 2017, the Company and Roche entered into a collaboration agreement ("Roche Collaboration Agreement") utilizing the Company's proprietary genome mining platform to discover and develop multiple novel classes of antibiotics. The serious global health threat of multidrug- resistant bacterial infections has created an urgent need for new antibiotics with novel structures and mechanisms of action.

Under the Roche Collaboration Agreement, the Company is focused on antibiotics with activity against clinically important, drug-resistant, Gram-negative pathogens. The Company's platform enables access to natural product drugs that have not been analyzed previously, due to historical technology limitations.

Under the Roche Collaboration Agreement, the Company granted Roche a worldwide, nontransferable, nonexclusive license with the right to sublicense under the Company's technology solely to perform the research activities assigned to Roche during the research term. Roche also granted the Company a worldwide, nontransferable nonexclusive license with the right to sublicense under the Roche technology solely for the Company to perform the research activities during the research term.

Under the terms of the Roche Collaboration Agreement, Roche has options for exclusive worldwide licenses to develop and commercialize certain antibiotic classes that emerge from the collaboration, triggered upon the selection of a drug development candidate from the particular class. The exercise of an option by Roche triggers the Company to grant Roche a nontransferable, exclusive, royalty bearing license with the right to sublicense under the Company technology. This exclusive license will be issued on the antibiotic program basis. The Company retains worldwide rights to all other novel antibiotic classes from the collaboration.

The Company is solely responsible for the conduct of research and development activities for each antibiotic program through selection of a drug development candidate. Roche may or may not exercise options for antibiotic programs at the drug development candidate stage. Roche has no obligations to develop or

commercialize under the Roche Collaboration Agreement, until such time, if any, that Roche exercises an option for a drug development candidate

The research term will be in effect for a period of time beginning in October 2017 through the later of October 2022 or 24 months after the Company achieves certain research milestones for the last eligible antibiotic programs. The Company is currently estimating a research term of five years for the Roche Collaboration Agreement, and the Company will revisit the research term estimate on an annual basis.

The activities under the Roche Collaboration Agreement are governed by the joint steering committee. Both Roche and the Company have three members on the joint steering committee. The three joint steering committee representatives of each party will collectively have one vote, and the Joint Steering Committee will make decisions only by unanimous consent. If the Joint Steering Committee is unable to decide, the Company will have the right to make the final determination. The Joint Steering Committee will end six months after the end of the research term.

#### Termination rights

The Roche Collaboration Agreement automatically terminates if Roche does not exercise an option on a development candidate generally by October 2022. Roche may voluntarily terminate the Roche Collaboration Agreement in its entirety or on a program by program basis upon 90 days' written notice.

#### Consideration

Roche paid the Company a \$23.0 million nonrefundable, up-front fee in October 2017. The Company estimates that the sum of the nonrefundable up-front fee already paid, potential option fees and potential milestone payments for preclinical events could total \$87 million. The Company estimates that the total potential clinical, regulatory and sales milestones on products licensed to Roche could total an additional \$300 million.

As of December 31, 2017, the next potential milestone payment included in the above-mentioned total of \$87 million that the Company could achieve under the Roche Collaboration Agreement is a nonsubstantive milestone payment of \$5.0 million for the achievement of a discovery milestone.

The Company is eligible to receive tiered royalties for antibiotic programs for which Roche exercises its options up to low double digits on future net sales.

#### Roche Collaboration Agreement Accounting Analysis

The Company evaluated the Collaboration Agreement in accordance with the provisions of ASC, Topic 605-25, Revenue Recognition—Multiple Element Arrangements. The Roche Collaboration Agreement contains the following deliverables: (i) R&D services for antibiotics; (ii) research license for the Company's platform; and (iii) joint steering committee services.

The Company has concluded that the research license deliverables do not qualify for separation from the R&D services deliverables. As it relates to the assessment of standalone value, the Company has determined that Roche cannot fully exploit the value of the research license deliverable without receipt of the Company's R&D services in the antibiotic programs. This is primarily due to the fact that Roche must rely upon the Company to provide the research and development services included in the research plan because the services incorporate technology that is proprietary to the Company. The services to be provided by the Company involve unique skills and specialized expertise technology that is not available in the marketplace. Accordingly, Roche must obtain the research and development services from the Company which significantly limits the ability for Roche

to utilize the research license for its intended purpose on a standalone basis. The Company's proprietary genome mining platform and know-how is critical. Therefore, the research license deliverables do not have standalone value from the R&D services.

The following deliverables are combined under one unit of accounting.

- Antibiotic program deliverables (consisting of the Research License and R&D services).
- · Joint Steering Committee services.

The aggregate noncontingent consideration allocable to the Roche Collaboration Agreement of \$23 million was allocated to the Antibiotic program deliverables. No amounts were allocated to the joint steering committee deliverable because the associated BESP was determined to be immaterial.

As there is no discernable patter of performance, the revenue is recognized on a straight-line basis over the research term estimated to last five years.

The Company has evaluated all of the research milestones that may be received in connection with the Roche Collaboration Arrangement. In evaluating if a milestone is substantive, the Company assesses whether: (i) the consideration is commensurate with either the Company's performance to achieve the milestone or the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the Company's performance to achieve the milestone, (ii) the consideration relates solely to past performance, and (iii) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. The research milestones are not considered to be substantive. Therefore, when the Company achieves a research milestone, the Company will use the cumulative catch-up approach and spread the remaining milestone to revenue over the remaining research term. The Company has deemed all development milestones as substantive, and will use the milestone method of recognizing development milestones as revenue when achieved. All commercial milestones will be accounted for in the same manner as royalties and recorded as revenue upon achievement of the milestone, assuming all other revenue recognition criteria are met. The Company will recognize royalty revenue in the period of sale of the related product(s), based on the underlying contract terms, provided that the reported sales are reliably measurable, and the Company has no remaining performance obligations, assuming all other revenue recognition criteria are met.

The Company recognized approximately \$1.1 million in collaboration revenue related solely to the up-front fee during the year ended December 31, 2017. The Company recorded deferred revenue of \$4.6 million in current portion of deferred revenue and \$17.3 million in deferred revenue less current portion for total deferred revenue of approximately \$21.9 million as of December 31, 2017.

#### B. Summary of Sanofi Collaboration

#### Overall

On January 8, 2016, the Company and Sanofi entered into a collaboration and license agreement (Sanofi Collaboration Agreement) utilizing the Company's proprietary SMART™ and genome mining platforms to discover novel oncology therapeutics and antibiotics. The Sanofi Collaboration Agreement focused on the development of drugs targeting important human oncogenes and new antibiotics. The Company retained the rights to deploy its platforms to pursue discovery and development against all other targets, both alone and in collaboration with other companies.

Under the terms of the Sanofi Collaboration Agreement, the Company would lead the research collaboration for a period of five years, and Sanofi would receive worldwide exclusive licenses to develop and commercialize product candidates discovered during the research term. The Company and Sanofi initially focused on three

defined oncology programs targeting different mutants and states of the oncogenic protein RAS. For the antibiotic program, the Company led initial discovery efforts, and Sanofi would lead any subsequent discovery and development activities.

The Company granted to Sanofi research licenses (co-exclusive, worldwide, royalty-free licenses). In addition, the Company granted to Sanofi development and commercialization licenses (exclusive, worldwide, royalty-bearing, sub licensable licenses in the prevention and treatment of all human and animal diseases). To the extent a collaboration program was terminated, the rights to both the research and development and commercialization licenses previously granted in relation to such terminated program immediately terminate.

The Company was solely responsible for the conduct of research and development activities for each collaboration program until the applicable transition stage (i.e., the specified point in time at which the research and development efforts are transitioned from the Company to Sanofi) for the respective collaboration program, unless otherwise agreed to by the parties in writing. Sanofi had no obligations to develop or commercialize under any collaboration program, until such time, if any, that the applicable transition has occurred. The Company reached the transition stage for the antibiotic program during the year ended December 31, 2016. The estimated research term for the antibiotic program was one year.

The activities under the Collaboration Agreement were governed by the joint steering committee. Both Sanofi and the Company had three members on the joint steering committee.

The Company had the right to opt-in to co-commercialize an oncology candidate in the United States, no later than 90 days prior to the initiation of a registration clinical study of such oncology candidate. If the Company exercised the co-commercialization option for a particular oncology candidate, the Company and Sanofi would be jointly responsible for and have joint control over the co-commercialization of the oncology candidate in the United States.

Additionally, in 2016, the Company restructured its existing senior credit agreement with Sanofi. Under the restructured agreement, the Company could borrow up to \$30.0 million to fund expenses related to the Sanofi Collaboration Agreement. As the Company previously held a line of credit with the same interest rate, the Company concluded that the modification of the line of credit did not represent consideration exchanged in conjunction with the Sanofi Collaboration Agreement. See Note 5.

#### Termination rights

The Sanofi Collaboration Agreement would automatically terminate if a development candidate was not generated for an oncology collaboration program prior to the expiration of the applicable research term (generally January 2021). Sanofi could voluntarily terminate the Sanofi Collaboration Agreement in its entirety or on a program by program basis upon 90 days' written notice. All rights and license grants in the Sanofi Collaboration Agreement would immediately terminate, unless otherwise specified, after the 90-day notice period.

In July 2017, Sanofi provided 90 days' written notice to terminate the antibiotic portion of the Sanofi Collaboration Agreement, which officially terminated in October 2017. In November 2017, Sanofi provided 90 days' written notice to terminate all oncology programs or the remaining portion of the research activities under the Sanofi Collaboration Agreement, which officially terminated in February 2018.

#### Consideration

During the research term, the Company could request Sanofi to provide R&D services. Subject to Sanofi's available resources and capabilities, Sanofi could agree to provide up to \$5.0 million in annual Sanofi R&D services at no charge to the Company.

The Company was entitled to worldwide royalties provided it did not opt-in to co-commercialize an oncology candidate in the United States.

#### Sanofi Collaboration Accounting Analysis

The Company evaluated the Collaboration Agreement in accordance with the provisions of ASC, Topic 605-25, Revenue Recognition— Multiple Element Arrangements. The Company's arrangement with Sanofi originally contained the following deliverables: R&D services for the antibiotic program; R&D services for the three oncology programs; research license for the antibiotic program; research license for the three oncology programs; and joint steering committee services.

The Company concluded that the research licenses (antibiotics and oncology programs) deliverables did not qualify for separation from the R&D Services deliverables. As it related to the assessment of standalone value, the Company determined that Sanofi could not fully exploit the value of the research licenses deliverable without receipt of the Company's R&D services in both the antibiotics and the oncology programs. This was primarily due to the fact that Sanofi must rely upon the Company to provide the research and development services included in the research plan because the services incorporate technology that was proprietary to the Company. The services to be provided by the Company involved unique skills and specialized expertise technology that was not available in the marketplace. Accordingly, Sanofi must obtain the research and development services from the Company which significantly limited the ability for Sanofi to utilize the research licenses for its intended purpose on a standalone basis. The Company's proprietary SMART™ and genome mining platforms and know-how was critical. Therefore, the research licenses deliverables did not have standalone value from the R&D services.

The units of accounting for the Collaboration Agreement included:

- Antibiotic program deliverables (consisting of the Research License, Development and Commercialization License and R&D services).
- Oncology programs deliverables (consisting of the Research License, Development and Commercialization License and R&D services).
- · Joint Steering Committee services.

The Company determined that neither vendor-specific objective evidence of selling price nor third party evidence of selling price was available for any of the units of accounting identified at inception of the arrangement with Sanofi. Accordingly, the selling price of each unit of accounting was determined based on the Company's best estimate of selling price or BESP. The Company developed the BESP for all of the units of accounting included in the Collaboration Agreement with the objective of determining the price at which it would sell such an item if it were to be sold regularly on a standalone basis. The Company developed the BESP for the primarily Antibiotic program unit of accounting (consisting of the Research License, Development and Commercialization License and R&D services) and the Oncology programs unit of accounting (consisting of the Research License, Development and Commercialization License and R&D services) based on the nature of the services to be performed and estimates of the associated effort and cost of the services, adjusted for a reasonable profit margin that would be expected to be realized under similar contracts. The Company developed the BESP for each of the Development and Commercialization license units of accounting based on the probability-weighted present value of expected future cash flows associated with each license related to each antibiotics or the oncology collaboration programs. In developing such estimates, the Company also considered applicable market conditions and relevant entity-specific factors, including those factors contemplated in negotiating the agreement, probability of success and the time needed to commercialize a product candidate pursuant to the associated license.

The aggregate noncontingent consideration allocable to the Collaboration Agreement of \$4.0 million was allocated among the separate units of accounting using the relative selling price method as follows: (i) antibiotic licenses and R&D services – approximately \$0.4 million; (ii) oncology programs licenses and R&D services – approximately \$3.6 million. No amounts were allocated to the joint steering committee deliverable because the associated BESP was determined to be immaterial. The amounts allocated to each of the development and commercialization licenses were based on the respective BESP calculations, which reflected the level of risk and expected probability of success inherent in the nature of the associated research area.

The amount allocated to the oncology programs deliverables unit of account were recognized over the research term as the underlying services were performed. As there was no discernable pattern of performance, the revenue was recognized on a straight-line basis over the development period. The consideration allocated to the antibiotic program deliverables was recognized as received as the Company had completed its performance obligations related to this deliverable during the year ended December 31, 2016, and the development efforts were transitioned to Sanofi.

The Company originally evaluated all of the milestones that could be received in connection with the Collaboration Arrangement. In evaluating if a milestone was substantive, the Company assessed whether: (i) the consideration was commensurate with either the Company's performance to achieve the milestone or the enhancement of the value of the delivered item(s) as a result of a specific outcome resulting from the Company's performance to achieve the milestone, (ii) the consideration related solely to past performance, and (iii) the consideration was reasonable relative to all of the deliverables and payment terms within the arrangement. Certain development and regulatory milestones were considered substantive on the basis of the contingent nature of the milestone, specifically reviewing factors such as the scientific, clinical, regulatory, commercial and other risks that must be overcome to achieve the milestone as well as the level of effort and investment required. Accordingly, such amounts could have been recognized as revenue in full in the period in which the associated milestone was achieved, assuming all other revenue recognition criteria were met. Certain development milestones were not considered to be substantive. Such amounts were allocated to the units of account based relative fair value of the BESP.

During the year ended December 31, 2016, the Company received a \$1.0 million discovery milestone that was essentially an up-front payment related to an oncology collaboration program and a \$3.0 million discovery milestone related to an oncology collaboration program that was considered nonsubstantive. Finally, during the year ended December 31, 2016, the Company achieved a \$0.8 million milestone related to the antibiotic program. The Company is primarily responsible for the R&D they are performing and as such receive milestones for this work performed and therefore, the Company concluded that milestone payments received are recorded gross. The Company recognized approximately \$1.9 million in collaboration revenue during the year ended December 31, 2016. The Company used the cumulative catch-up approach in recognizing revenue associated with achieved nonsubstantive milestones. The Company recorded deferred revenue of approximately \$2.9 million associated with the Sanofi Collaboration Agreement as of December 31, 2016.

The Company received \$2.1 million and \$2.0 million of Sanofi R&D services for the years ended December 31, 2017 and 2016, respectively. As Sanofi is responsible for the work related to R&D services, the Company concluded that R&D services provided by Sanofi are recorded net.

During the year ended December 31, 2017, the Company achieved five discovery milestones that were considered nonsubstantive and received \$11.0 million in total milestone payments from Sanofi.

As previously disclosed, in November 2017, Sanofi gave 90 days' written notice to terminate all oncology programs in the Sanofi Collaboration Agreement, which officially terminated in February 2018. This resulted in an accounting change in estimate in 2017 with the research term ending in February 2018 (90 days later).

The Company recognized approximately \$13.0 million of revenue related to the Sanofi Collaboration Agreement during the year ended December 31, 2017. The Company's short-term deferred revenue as of December 31, 2017 totaled approximately \$0.9 million from the Sanofi Collaboration Agreement, which will be recognized as revenue through the end of the research term in February 2018, at which time all services under the collaboration ended.

## 5. Convertible notes payable, related party

On January 8, 2016, the Company restructured the prior senior credit agreement with Sanofi into convertible notes payable. Under the restructured agreement, the Company could borrow up to \$30,000,000 to fund certain expenses.

As previously disclosed, in November 2017, Sanofi provided 90 days' written notice to terminate all oncology programs or the remaining portion of the research activities under the Sanofi Collaboration Agreement, which officially terminated in February 2018. With the termination of the Sanofi Collaboration Agreement, the maturity date of notes payable, related party became February 2020.

The notes payable bore interest at LIBOR plus 8.5%. Subject to certain exceptions, there were no payments due prior to maturity, and interest is paid-in-kind. The notes payable were automatically convertible into shares of common stock upon the completion of an initial public offering and convertible at the option of the investor upon a financing in which the Company sold shares of a new series of preferred stock in which the Company receives proceeds of at least \$30.0 million. The conversion rate upon such conversion was 95% of the initial public offering price or 95% of the financing purchase price. If the Company was acquired, then the acquirer of the Company had to pay \$36.0 million in principal (120 percent of the outstanding debt of \$30.0 million). The Company accounted for the amendment as a modification as the terms of the amendment were not substantially different from the original terms of the term loan.

The Company borrowed \$8,999,731 and \$17,451,965 during the years ended December 31, 2017 and 2016, respectively. The Company recorded noncash interest expense of \$2,934,532 and \$1,062,213 during the years ended December 31, 2017 and 2016, respectively. The effective interest rate was 10.1% and 9.6% for the years ended December 31, 2017 and 2016, respectively.

In June 2018, the Company and Sanofi agreed to amend the terms of existing notes payable. All current and future interest due on the notes payable was cancelled and forgiven in full. In addition, a milestone payment (Sanofi to pay the Company) of \$6 million under the Sanofi Collaboration Agreement was cancelled and forgiven in full. Sanofi has no further payment obligations due to the Company under the Sanofi Collaboration Agreement. The Company will exchange its existing notes payable for new notes payable with amended terms from Sanofi immediately prior to the closing of the Company's first issuance and sale of preferred stock prior to December 31, 2019.

#### 6. Grants

In September 2016, the Company was awarded a grant from the Cystic Fibrosis Foundation for the preclinical development of Neomorph antibiotics for treatment of Cystic Fibrosis related infections. In early 2017, the Company was awarded multiple antibiotic grants from Small Business Innovation Research through the government of the United States. In April 2017, the Company was awarded a grant for a total of \$1.1 million from the Bill and Melinda Gates Foundation for research related to antibiotics for the treatment of tuberculosis and gram-negative infections.

Revenue recorded under antibiotic grants during the year ended December 31, 2017 consisted of the following:

	2017
Gates Foundation Grant	\$ 649,569
Cystic Fibrosis Foundation Grant	320,000
Small Business Innovation Research Grants	702,312
Total Grant Revenue	\$ 1,671,881

## 7. Balance sheet components

Prepaid expenses consisted of the following:

	Decem	nber 31,
	2017	2016
Prepaid software licenses	\$ 198,339	\$ 206,346
Prepaid rent	172,761	165,205
Prepaid maintenance services	110,314	64,421
Other	46,144	107,830
Total prepaid expenses and other current assets	\$ 527,558	\$ 543,802

Accrued expenses consisted of the following:

	Decem	ber 31,
	2017	2016
Accrued compensation and benefits	\$ 1,407,236	\$ 1,009,594
Accrued contract research organization costs	381,757	377,895
Accrued other	370,216	467,073
Total accrued liabilities	\$ 2,159,209	\$ 1,854,562

## 8. Convertible preferred stock and stockholders' deficit

In January 2016, the Company amended the Limited Liability Company Agreement with its preferred shareholders, and restructured the Company as a C Corporation. In conjunction with the recapitalization, certain put and call rights that the Company's two primarily investors held were eliminated, and the holders of preferred units received an equivalent number of shares of Series A preferred stock. The holders of common units received an equivalent number of common stock.

In evaluating the above restructuring, the Company considered that the rights and preferences of each class of equity before and after the restructuring and determined that there were no substantive changes in the rights and preferences. The fair value of each stockholders' interest remained unchanged as a result of the above restructuring. The restructuring lacked economic substance and should be accounted for in a manner consistent with a common control transaction. Therefore, the Company concluded that the restructuring represented a modification of equity, and not an extinguishment, and that there was no incremental value given to the holders of the equity requiring recognition.

#### Series A Convertible Preferred Stock

The Series A Convertible Preferred Stock ("Series A Preferred Stock") has the following characteristics:

#### Voting

The Series A Preferred Stock is entitled to vote together with the common stockholders as one class and are entitled to separate votes on certain matters.

#### **Dividends**

The Series A stockholders are entitled to receive an annual, cumulative 8% dividend, when and if declared by the Board of Directors. No dividends have been declared through December 31, 2017.

#### Liquidation preference

The Series A stockholders are entitled to a liquidation preference of their original purchase price of \$1.00 per share for Series A Preferred Stock shares, plus accumulated dividends, in the event of liquidation, dissolution, or winding up of the Company. In the event the Company merges with, or is acquired by, another entity, such merger or acquisition could be deemed a dissolution.

#### Conversion

The Series A Preferred Stock is convertible upon approval of the holders of at least 66.66% of the outstanding shares of Series A preferred stock, on a share-for-share basis, subject to certain antidilution adjustments. The Series A preferred stock converts automatically on a share-for-share basis into shares of common stock upon the closing of the shares of common stock to the public in a firm commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$40,000,000 of gross proceeds to the Company.

#### Redemption rights

The Series A Preferred Stock can be redeemed in a merger or consolidation involving the Company or a sale, lease, transfer, exclusive license or other disposition of substantially all the assets of the Company. The preferred stock is otherwise not redeemable.

Prior to the 2016 restructuring to a C Corporation, the holders of the Company's Series A Preferred Units, Common Units and Capital interests had certain voting, dividend rights, as well as liquidation preferences and conversion privileges. All rights, preferences, and privileges associated with these Units were terminated at the time of the Company's restructuring to a C Corporation.

During the year ended December 31, 2017, the Company changed the classification of the Series A Preferred Stock balances from permanent equity to mezzanine equity. The change was applied retrospectively.

#### Common stock

Each holder of common stock is entitled to one vote per share of common stock. Subject to the rights of holders of Series A Preferred Stock as described above, holders of common stock are also entitled (i) to receive dividends whenever funds are legally available and when declared by the Board of Directors and (ii) upon a deemed liquidation, to receive ratably and equally with the holders of Series A Preferred Stock all the asset and funds of the Company remaining after the payment to the holders of Series A Preferred Stock of the amounts which they are entitled, as provided above.

## 9. Equity awards

In January 2016, the Company amended the Limited Liability Company Agreement with its preferred shareholders, and restructured the Company as a C Corporation. The holders of participation units, the equity award previously given to employees (and to nonemployees on occasion) were also called Capital Interests on the Statements of Convertible Preferred Stock and Stockholders' Deficit. The holders of participation units received an equivalent number of shares of restricted stock on the same vesting schedule.

The Company adopted the 2016 Stock Option and Grant Plan (2016 Plan) during the above described restructuring in January 2016. The maximum number of shares reserved and available for issuance under the 2016 Plan is 20,064,924 shares. As of December 31, 2017, 3,004,141 restricted stock awards were available for future grant under the Plan. The Company has issued restricted stock (as opposed to stock options) to employees since the adoption of the 2016 Plan. Upon grant of the restricted stock award and payment of any applicable purchase price by the employee, a grantee of the restricted stock is considered the record owner and is entitled to vote the restricted stock. Restricted stock may not be sold, assigned, transferred, pledged or otherwise encumbered or disposed of except as specifically provided in the 2016 Plan or award agreement. If an employee leaves the Company, the Company has the right and option to repurchase the unvested restricted stock. Restricted stock granted by the Company typically vest over four years and have a contractual life of ten years.

The Company granted 1,107,150 and 3,742,345 shares of restricted stock to employees for the years ended December 31, 2017 and 2016, respectively. For all grants during the years ended December 31, 2017 and 2016, the employees paid the Company for the fair value of the restricted stock awards. As a result, the Company did not recognize any stock-based compensation for restricted stock grants made in 2017 and 2016. However, the Company did recognize stock-based compensation related to grants of participation units and capitalized interests prior to January 1, 2016.

The Company recorded stock-based compensation expense in the following expense categories in its Statements of Operations and Comprehensive Loss:

	2017	2016
Research and development expense	\$ 122,880	\$ 198,309
General and administrative expense	517,598	787,174

For the year ended December 31, 2017, the above amounts included total stock-based expense for nonemployees of approximately \$1,129.

The following table summarizes the Company's restricted stock activity for the year ended December 31, 2017, as well as total common stock at December 31, 2017:

	Number of restricted shares	gran	ted-average t date fair value
Total restricted stock on January 1, 2017	19,931,258	\$	0.01
Restricted stock granted	1,107,150		0.01
Restricted stock cancelled	(3,278,377)		0.01
Restricted stock at December 31, 2017	17,760,031	\$	0.01

As of December 31, 2017, there was approximately \$0.6 million of total unrecognized compensation cost related to restricted stock with time-based vesting, which is expected to be recognized over a remaining weighted-average vesting period of approximately 1.1 years. The weighted-average grant date fair value of restricted stock granted was \$0.01 for the year ended December 31, 2017.

During the years ended December 31, 2017 and December 31, 2016, no shares subject to performance-based milestones vested, and the Company did not record any stock-based compensation related to these performance-based restricted stock as the vesting conditions are not probable of achievement. The Company cancelled all 2,100,000 unvested performance-based restricted shares upon the resignation of a former executive during the year ended December 31, 2017.

## 10. Commitments and contingencies

In May 2017, the Company and the landlord finalized an extension of the Company's primary facilities in Cambridge, Massachusetts through February 2023. The lease extension includes a rent increase of approximately 12% starting in March 2018 and three percent annual rent increases through 2023. In May 2017, the Company and the landlord reduced the security deposit related to the facility lease, which is the restricted cash on the Company's balance sheet, by approximately \$107,000.

In conjunction with the original lease, the landlord provided the Company with a \$3.5 million tenant improvement allowance, of which the entire amount was utilized in 2013 and represented normal tenant improvements. The improvements are recorded as leasehold improvements on the balance sheet. The incentive has been recorded as a lease incentive obligation which is being amortized as a reduction of rent expense over the term of the lease. At December 31, 2017 and 2016, the deferred rent and lease incentive obligations are recorded as deferred rent on the balance sheet.

The Company recorded rent expense of \$859,634 and \$781,273 for the years ended December 31, 2017 and December 31, 2016, respectively.

Minimum rental payments under the operating leases as of December 31, 2017 are as follows:

	Operating leases
2018	\$ 1,582,607
2019	1,651,034
2020	1,700,565
2021	1,751,582
2022	1,804,129
	\$ 8,489,917

The Company has entered into certain license agreements. Pursuant to the terms of those agreements, the Company may be required to pay up to \$2,000,000 upon the achievement of various developments, regulatory and sales milestones. The payment of these amounts, however, is contingent upon the occurrence of various future events. Additionally, the Company has licensed technology from an academic institution for which it is required to pay annual license payments of \$50,000 for as long as the patent is in effect. If any product related to the licenses technology from an academic institution are approved for sale, the Company may be required to pay a minimal royalty on future sales.

The Cystic Fibrosis Foundation grant agreement contains provisions related to potential future amounts payable by the Company to the Cystic Fibrosis Foundation upon product approval and upon the achievement of certain sales milestones. In addition, in the event of a change of control or licensing, sale, or other transfer of the technology, the Company shall pay the Cystic Fibrosis Foundation a payment equal to a percentage of the related transaction price, not to exceed \$1.4 million, which amount shall be reduced by any payments previously made by the Company in connection with a product approval.

#### 11. Employee retirement/savings plan

The Company maintains an employee retirement/savings plan (the Retirement Plan) which permits participants to make tax-deferred contributions by salary reduction pursuant to Section 401(k) of the Internal Revenue Code. The Company does not provide a matching contribution to the Retirement Plan.

## 12. Related-party transactions

In conjunction with the issuance of Series A preferred stock and common stock and the conversion of the prior credit agreement into convertible notes payable (Note 5), the Company simultaneously entered into a research collaboration with Sanofi in which it obtained an exclusive license focused on the development of drugs targeting important human oncogenes (Note 4). Under the terms of the Agreement, the Company would lead research collaboration for a period of five years, and Sanofi would potentially receive worldwide exclusive licenses to develop and commercialize the candidates discovered during the research term. The Company has total convertible notes payable from Sanofi of approximately \$34 million and \$22 million as of December 31, 2017 and 2016, respectively. (Note 5)

The Company leases its facilities from an entity that participated in the Series A Unit financing in October 2012. Prior to and after the restructuring of the Company, the investor owned less than one percent of the Series A Preferred Units and Series A Preferred Stock of the Company, respectively. Payments made to the landlord totaled approximately \$2.1 million and \$2.2 million for the years ended December 31, 2017 and December 31, 2016, respectively.

#### 13. Income taxes

#### 2017 U.S. tax reform

On December 22, 2017, the Tax Cuts and Jobs Act (the "TCJA") was signed into United States law. The TCJA includes a number of changes to existing tax law, including, among other things, a reduction in the federal corporate income tax rate to a flat rate of 21%, effective as of January 1, 2018, as well as limitation of the deduction for net operating losses to 80% of annual taxable income and elimination of net operating loss carrybacks, in each case, for losses arising in taxable years beginning after December 31, 2017 (though any such net operating losses may be carried forward indefinitely).

The Company remeasured certain deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future. The provisional amount related to the re-measurement of the Company's deferred tax balance was a reduction of \$5.6 million. Due to the corresponding valuation allowance fully offsetting deferred taxes, there was no impact to the statement of operations and comprehensive loss.

The Company is still in the process of analyzing the impact to the Company of the TCJA and its analysis is not yet complete. Where the Company has been able to make reasonable estimates of the effects related to the TCJA, the Company has recorded provisional amounts. The ultimate impact to the Company's financial statements of the TCJA may differ from the provisional amounts.

### Income taxes

There is no provision for income taxes because the Company has historically incurred and continues to incur operating losses and maintains a full valuation allowance against its net deferred tax assets. The Company has incurred pre-tax losses in the United States only for all periods presented.

The provision for income tax differs from the amount expected by applying the federal statutory rate to the loss before taxes as follows:

	2017	2016
Federal statutory income tax rate	34.0%	34.0%
State income tax rate, net of federal benefit	6.9	5.3
Research tax credits	4.1	4.7
Write-off of net operating loss and research and development credit carryforwards	(82.1)	_
Change in valuation allowance	67.6	(42.3)
Non-deductible permanent expenses	(1.2)	(1.5)
Remeasurement of deferred tax due to tax law change	(29.3)	· —
Other	_	(0.2)
Provision for income taxes	0.0%	0.0%

Significant components of the Company's net deferred tax asset at December 31, 2017 and 2016 are as follows:

	2017	2016
Deferred tax assets		
Net operating loss carryforwards	\$ 12,272,047	\$ 23,870,603
Research and development credits	2,521,478	2,772,715
Other	468,468	725,369
Gross deferred tax assets	15,261,993	27,368,687
Valuation allowance	(15,186,711)	(26,933,978)
Net deferred tax assets	75,282	434,709
Deferred tax liabilities		
Property and equipment	(75,282)	(434,709)
Net deferred tax assets	\$ —	\$ —

As of December 31, 2017, the Company had federal and state net operating loss carryforwards of approximately \$46,038,000 and \$41,203,000, respectively. The net operating loss carryforwards will expire at various times beginning in 2030 through 2037 for federal purposes and beginning in 2021 through 2022 for state purposes.

As of December 31, 2017, the Company also had federal and state research and development tax credit carryforwards of approximately \$1,649,000 and \$1,017,000, respectively, to offset future income taxes. The tax credit carryforwards will expire at various times beginning in 2036 through 2037 for federal purposes and will expire at various times beginning in 2031 through 2032 for state purposes.

Utilization of the net operating loss and tax credit carryforwards may be subject to a substantial annual limitation under Section 382 and 383 of the Internal Revenue Code due to certain ownership changes that have occurred previously or that could occur in the future. These ownership changes may limit the amount of net operating loss and tax credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. Any limitation may result in expiration of a portion of the net operating loss carryforwards or tax credit carryforwards before utilization.

The Company completed a study in May 2018 to determine the impact of certain cumulative changes in the ownership interest of significant shareholders as defined under Sections 382 and 383. The study determined that such changes triggered certain limitations on the Company's net operating loss and tax credit carryforwards that would have otherwise been available to offset future taxable income and tax, respectively.

The 2017 amounts in the table above reflect the related limitations to federal and state net operating loss and tax credit carryforwards. Additional ownership changes could occur in the future that could further limit the federal and state net operating loss and tax credit carryforwards.

Management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which are comprised principally of net operating loss carryforwards, capitalized assets, and research and development credits. Under the applicable accounting standards, management has considered the Company's history of losses since inception and concluded that it is more likely than not that the Company will not recognize the benefits of federal and state deferred tax assets. Accordingly, a full valuation allowance of \$15.2 million and \$26.9 million has been established at December 31, 2017 and 2016, respectively.

The Company has not recorded any amounts for unrecognized tax benefits as of December 31, 2017 and 2016. The Company's policy is to record interest and penalties related to income taxes as part of its income tax provision. As of December 31, 2017 and 2016 the Company had no accrued interest or penalties related to uncertain tax positions.

The statute of limitations for assessment by the Internal Revenue Service ("IRS") and state tax authorities is closed for tax years prior to December 31, 2014, although net operating loss and tax credit carryforwards that were generated prior to December 31, 2014 may still be adjusted upon examination by the IRS and state tax authorities if they either have been or will be used in a future period. There are currently no IRS or state tax audits in progress.

## 14. Subsequent events

The Company has evaluated subsequent events through October 16, 2018, the date the financial statements were available to be issued.

As discussed in Note 5, in June 2018, the Company and Sanofi agreed to amend the terms of the existing notes payable. All current and future interest due on the notes payable was cancelled and forgiven in full. In addition, a milestone payment (Sanofi to pay the Company) of \$6 million due to the Company under the Sanofi Collaboration Agreement was cancelled and forgiven in full. Sanofi has no further payment obligations due to the Company under the Sanofi Collaboration Agreement. The Company will exchange its existing notes payable for new notes payable, with an extended maturity date and certain other amended provisions, from Sanofi immediately prior to the closing of the Company's first issuance and sale of preferred stock prior to December 31, 2019.

On October 3, 2018, the Company received \$2 million in cash proceeds from an existing investor in exchange for a convertible promissory note purchase agreement with a maturity date of April 8, 2019 and an 8% annual interest rate.

On October 15, 2018, the Company and Revolution Medicines, Inc. ("Revolution") signed a merger agreement in which Revolution will acquire all the equity interests of the Company for a purchase price of approximately \$70 million subject to adjustments and holdbacks for certain events. Subject to the achievement of certain closing conditions, including the conversion to preferred stock of all of the outstanding convertible notes payable held by Sanofi, the merger agreement is expected to close on or around October 22, 2018.

# Warp Drive Bio, Inc. Condensed balance sheets (unaudited)

	Se	September 30,		ecember 31,
		2018		2017
Assets				
Current assets				
Cash and cash equivalents	\$	589,215	\$	18,616,527
Prepaid expenses and other current assets		568,283		527,558
Total current assets		1,157,498		19,144,085
Property and equipment, net		2,768,167		4,008,581
Restricted cash		213,821		213,581
Total assets	\$	4,139,486	\$	23,366,247
Liabilities, Convertible Preferred Stock and Stockholders' Deficit				
Current liabilities				
Accounts payable	\$	2,217,276	\$	1,816,045
Accrued expenses		2,030,374		2,159,209
Current portion capital lease		135,730		114,866
Current portion of deferred revenue		4,600,000		5,482,353
Current portion of deferred rent		_		107,783
Total current liabilities		8,983,380		9,680,256
Convertible notes payable, related party		30,000,000		33,989,320
Capital lease, less current portion		198,565		301,364
Deferred revenue, less current portion		13,800,000		17,250,000
Deferred rent, less current portion		314,400		255,067
Total liabilities		53,296,345		61,476,007
Commitments and contingencies (Note 9)				
Convertible preferred stock				
Series A convertible preferred stock, \$0.001 par value; 75,000,000 shares authorized, issued and outstanding at September 30, 2018 and December 31, 2017; aggregate liquidation preference of \$104,466,444 and \$99,983,111 at September 30, 2018 and December 31, 2017, respectively		74,259,411		74,259,411
Stockholders' deficit				
Common stock, \$0.001 par value; 121,500,000 shares authorized, 19,017,534 and 19,083,561 shares		19,018		19,084
Additional paid-in capital		5,450,595		5,088,905
Accumulated deficit	(	(128,885,883)	(	117,477,160
Total stockholders' deficit		(123,416,270)		112,369,171)
Total liabilities, convertible preferred stock and stockholders' deficit	\$	4,139,486		23,366,247
The eccempanying pates are an integral part of these condensed financial statements	Ψ	1,100,400	Ψ	20,000,247

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

# Warp Drive Bio, Inc. Condensed statements of operations and comprehensive loss (unaudited)

		onths ended ember 30,
	2018	2017
Revenue:		
Collaboration revenue, related party	\$ 882,353	\$ 4,402,077
Collaboration revenue	3,450,000	_
Grant revenue	463,931	982,353
Total revenue	4,796,284	5,384,430
Operating expenses		
Research and development	14,936,903	18,145,152
General and administrative	5,335,931	5,539,682
Total operating expenses	20,272,834	23,684,834
Loss from operations	(15,476,550	(18,300,404)
Gain on restructuring of debt, related party	5,053,805	
Interest and income	101,527	16,697
Interest expense	(1,087,505	(2,112,225)
Net loss and comprehensive loss	\$ (11,408,723	(20,395,932)

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

# Warp Drive Bio, Inc. Condensed statements of cash flows (unaudited)

		Nine months ended September 30,			
		2018		2017	
Operating activities					
Net loss	\$	(11,408,723)	\$	(20,395,932)	
Adjustments to reconcile net loss to net cash used in operating activities:					
Noncash interest expense		1,064,484		2,112,225	
Stock-based compensation		362,284		508,649	
Gain on restructuring of debt, related party		(5,053,805)		_	
Gain on sale of fixed assets		(2,476)		_	
Depreciation and amortization		1,442,952		1,869,436	
Changes in operating assets and liabilities					
Prepaid expenses and other current assets		(40,725)		101,221	
Accounts payable		424,867		1,004,348	
Accrued expenses		(128,834)		(173,096)	
Deferred revenue		(4,332,353)		6,597,923	
Deferred rent		(48,450)		(487,600)	
Net cash used in operating activities		(17,720,779)		(8,862,826)	
Investing activities					
Purchases of property and equipment		(226,174)		(901,509)	
Change in restricted cash		(240)		106,707	
Proceeds from sale of property and equipment		2,476		_	
Net cash used in investing activities		(223,938)		(794,802)	
Financing activities					
Proceeds from issuance of restricted stock		3,100		5,775	
Repurchase of unvested restricted stock		(3,760)		(4,780)	
Proceeds from notes payable, related party				8,999,731	
Repayments of capital lease		(81,935)		· · · · —	
Net cash provided by (used in) financing activities		(82,595)		9,000,726	
Net increase (decrease) in cash and cash equivalents		(18,027,312)		(656,902)	
Cash and cash equivalents		(10,021,012)		(000,000)	
Beginning of period		18,616,527		2,173,765	
End of period	\$	589,215	\$	1,516,863	
Supplemental disclosure of noncash activities	<u> </u>	·		• •	
Equipment purchases included in accounts payable	\$		\$	15,000	

 $\label{thm:company} \textit{The accompanying notes are an integral part of these condensed financial statements}.$ 

# Warp Drive Bio, Inc. Notes to the unaudited condensed financial statements

## 1. Organization and basis of presentation

Warp Drive Bio, Inc. (the "Company") operates on the core principle that nature is the most powerful inventor of new drugs, unconstrained by the boundaries of modern science.

The Company is deploying innovative Small Molecule-Assisted Receptor Targeting (SMART<sup>™</sup>) and Genomic Mining / antibiotic platforms to discover new medicines that have the potential to make a significant difference in the lives of patients. The Company was launched in 2011 through a partnership with Sanofi and with financing from Third Rock Ventures and Greylock Partners. As described in Note 13, on October 24, 2018, the Company and Revolution Medicines, Inc. ("Revolution") completed a sale pursuant to an Agreement and Plan of Merger in which Revolution acquired all the Series A convertible preferred stock and the common stock of the Company.

#### Unaudited interim financial information

The accompanying unaudited interim financial statements of Warp Drive Bio, Inc. (the "Company") should be read in conjunction with the Company's audited financial statements as of and for the year ended December 31, 2017. The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information. Accordingly, since they are interim statements, the accompanying financial statements do not include all of the information and notes required by GAAP for a complete financial statement presentation. In the opinion of management, the interim financial statements reflect all adjustments consisting of normal, recurring adjustments that are necessary for a fair statement of the financial position, results of operations and cash flows for the condensed interim periods presented. Interim results are not necessarily indicative of results for a full year.

#### Liquidity

The Company's financial statements have been prepared on the basis of continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the ordinary course of business. The Company has primarily funded its operations with proceeds from the sales of preferred stock, convertible notes and payments received from collaboration arrangements.

The Company has incurred losses since its inception, including net losses of approximately \$11.4 million and \$18.2 million for the nine months ended September 30, 2018 and year ended December 31, 2017, respectively. As of September 30, 2018, the Company had an accumulated deficit of approximately \$128.9 million. The Company expects that its operating losses and negative cash flows will continue for the foreseeable future. On October 3, 2018, the Company received \$2 million in cash proceeds from an existing investor in exchange for a convertible promissory note purchase agreement with a maturity date of April 8, 2019 and an 8% annual interest rate. (See Note 13).

The future viability of the Company is dependent on its ability to draw down additional capital from its parent company to finance its operations. There is no assurance that the Company will be successful in obtaining such financing from its parent. If adequate funds are not available to the Company, the Company may be required to delay, reduce or eliminate research and development programs, reduce operational costs, or obtain funds through arrangements with collaborators on terms unfavorable to the Company. The circumstances described above raise substantial doubt about the Company's ability to continue as a going concern as of the date the financial statements are issued. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

#### 2. Significant accounting policies

#### Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

#### Significant accounting policies

The Company's significant accounting policies are described in Note 2, "Summary of Significant Accounting Policies," in the Company's audited financial statements for the year ended December 31, 2017.

#### Newly adopted accounting pronouncements

In March 2016, the FASB issued ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting, or ASU No. 2016-09, which simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification of cash flows. In 2018, the Company adopted ASU 2016-09 and elected to account prospectively for forfeitures as they occur rather than apply an estimated forfeiture rate to stock-based compensation expense. The adoption of ASU 2016-09 had no impact on the Company's financial position, results of operations or cash flows.

#### Newly issued accounting pronouncements

In May 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standard Update, or ASU No. 2014-9, Revenue from Contracts with Customers, which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the Company expects to receive for those goods or services. The update also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for private companies for annual reporting periods beginning after December 15, 2018 and should be applied retrospectively to each prior reporting period presented or retrospectively with the cumulative effect of initially applying this update recognized at the date of initial application. The Company is currently evaluating the impact of the adoption of this standard on its financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases. This standard sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e., lessees and lessors). The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases today. ASU 2016-02 is effective for private companies for annual reporting periods beginning after December 15, 2019. The Company is currently evaluating the impact of the adoption of this standard on its financial statements.

In November 2016, FASB issued ASU No. 2016-18, Statement of Cash Flows, Restricted Cash, or ASU No. 2016-18, which provides guidance on the presentation of restricted cash and restricted cash equivalents in the statement of cash flows. Under ASU No. 2016-18, the statement of cash flows shall explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Amounts generally described as restricted cash and cash equivalents should now be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period amounts shown on the statements of cash flows. This ASU is effective for private companies for reporting periods beginning after December 15, 2018, with early adoption permitted. Other than the revised statement of cash flows presentation, the adoption of ASU No. 2016-18 will not have an impact on the Company's financial statements.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820)—Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement. ASU 2018-13 removes the disclosure requirement for the amount and reasons for transfers between Level 1 and Level 2 fair value measurements as well as the process for Level 3 fair value measurements. In addition, the ASU adds the disclosure requirements for changes in unrealized gains and losses included in Other comprehensive income (loss) for recurring Level 3 fair value measurements held at the end of the reporting period as well as the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. The ASU is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years and will be applied on a retrospective basis to all periods presented. Early adoption is permitted. The Company is currently evaluating the impact this standard will have on its financial statements and related disclosures.

In November 2018, the FASB issued ASU 2018-18, Collaboration Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606 to clarify the interaction between the accounting guidance for collaborative arrangements and revenue from contracts with customers. The amendments become effective for the Company's fiscal year, including interim periods, beginning January 1, 2021. Early adoption, including adoption in any interim period, is permitted. This guidance is required to be applied retrospectively as of the date of the Company's adoption of the new revenue standard on January 1, 2019. The Company is currently evaluating the timing of the Company's adoption and the expected impact this guidance could have on its financial statements and related disclosures.

## 3. Property and equipment

Property and equipment consist of the following:

	Useful life	Se	eptember 30, 2018	De	cember 31, 2017
Lab equipment	5 years	\$	9.131.787	\$	8.971.721
Computer equipment and software	•	Ψ	762.334	Ψ	738.132
	3 years		- ,		, -
Office furniture	5 years		129,460		129,460
Leasehold improvements	Lesser of useful life or lease term		4,827,801		4,827,801
Total property and equipment, at cost			14,851,382		14,667,114
Accumulated depreciation and amortization			(12,083,215)		(10,658,533)
Property and equipment, net		\$	2,768,167	\$	4,008,581

#### 4. Collaborations

#### Roche collaboration

In October 2017, the Company and F. Hoffman-La Roche Limited and Hoffman-La Roche Inc. ("Roche") entered into a collaboration agreement ("Roche Collaboration Agreement") utilizing the Company's proprietary genome mining platform to discover and develop multiple novel classes of antibiotics.

Under the Roche Collaboration Agreement, the Company is focused on antibiotics with activity against clinically important, drug-resistant, Gram-negative pathogens. The Company's platform enables access to natural product drugs that have not been analyzed previously, due to historical technology limitations.

The Company is solely responsible for the conduct of research and development activities for each antibiotic program through selection of a drug development candidate. Roche may or may not exercise options for antibiotic programs at the drug development candidate stage. Roche has no obligations to develop or commercialize under the Roche Collaboration Agreement, until such time, if any, that Roche exercises an option for a drug development candidate.

Roche paid the Company a \$23 million nonrefundable, up-front fee in October 2017.

The Company estimates that the sum of the nonrefundable up-front fee already paid, potential option fees and potential milestone payments for preclinical events could total \$87 million.

The Company estimates that the total potential clinical, regulatory and sales milestones on products licensed to Roche could total an additional \$300 million.

The research term will be in effect for a period of time beginning in October 2017 through the later of October 2022 or 24 months after the Company achieves certain research milestones for the last eligible antibiotic programs. The Company is currently estimating a research term of five years for the Roche Collaboration Agreement.

The Roche Collaboration Agreement automatically terminates if Roche does not exercise an option on a development candidate by October 2022. Roche may voluntarily terminate the Roche Collaboration Agreement in its entirety or on a program by program basis upon 90 days' written notice.

The Company is eligible to receive tiered royalties for antibiotic programs for which Roche exercises its options up to low double digits on future net sales.

As there is no discernable patter of performance, the revenue is recognized on a straight-line basis over the research term, assumed to last five years.

The Company recognized approximately \$3.5 million in collaboration revenue related solely to the up-front fee during the nine months ended September 30, 2018. The Company recorded total deferred revenue of approximately \$18.4 million (\$4.6 million in current portion of deferred revenue and \$13.8 million in deferred revenue less current portion) as of September 30, 2018.

#### Sanofi collaboration

In January 2016, the Company and Sanofi entered into a collaboration and license agreement (Sanofi Collaboration Agreement) utilizing the Company's proprietary SMART™ and genome mining platforms to discover novel oncology therapeutics and antibiotics. The Sanofi Collaboration Agreement focused on the development of drugs targeting important human oncogenes and new antibiotics. The Company was solely responsible for the conduct of research and development activities for each collaboration program until the

applicable transition stage (i.e., the specified point in time at which the research and development efforts are transitioned from the Company to Sanofi) for the respective collaboration program, unless otherwise agreed to by the parties in writing. Sanofi had no obligations to develop or commercialize under any collaboration program, until such time, if any, that the applicable transition has occurred.

Under the terms of the Sanofi Collaboration Agreement, the Company would lead the research collaboration for a period of five years, and Sanofi would receive worldwide exclusive licenses to develop and commercialize product candidates discovered during the research term.

The Company and Sanofi initially focused on three defined oncology programs targeting different mutants and states of the oncogenic protein Ras. For the antibiotic program, the Company led initial discovery efforts, and Sanofi would lead any subsequent discovery and development activities. The Company reached the transition stage for the antibiotic program during the year ended December 31, 2016. The estimated research term for the antibiotic program was one year.

In July 2017, Sanofi provided 90 days' written notice to terminate the antibiotic portion of the Sanofi Collaboration Agreement, which officially terminated in October 2017. In November 2017, Sanofi provided 90 days' written notice to terminate all oncology programs or the remaining portion of the research activities under the Sanofi Collaboration Agreement, which officially terminated in February 2018.

From the start of the Sanofi Collaboration Agreement through December 31, 2017, the Company received \$15.8 million in milestone payments from Sanofi. In June 2018, a milestone payment of \$6.0 million, which was achieved in December 2017, was cancelled and forgiven in full per the terms of the convertible notes payable amendment (see Note 5). This milestone payment was not previously recorded for accounting purposes due to collectability not being reasonably assured.

The Company did not receive any milestone payments from Sanofi during the nine months ended September 30, 2018.

The Company recognized approximately \$0.9 million of revenue related to the Sanofi Collaboration Agreement during the nine months ended September 30, 2018. The Company had zero deferred revenue as of September 30, 2018 related to the Sanofi Collaboration Agreement and no additional revenue will be recognized as the Company has fulfilled its obligations to Sanofi up through the termination date which occurred in February 2018.

## 5. Convertible notes payable, related party

Under the January 2016 convertible notes payable agreement with Sanofi, the Company could borrow up to \$30.0 million to fund certain expenses. The notes payable bore interest at LIBOR plus 8.5%. Subject to certain exceptions, there were no payments due prior to maturity, and interest is paid-in-kind. The notes payable were automatically convertible into shares of common stock upon the completion of an initial public offering and convertible at the option of the investor upon a financing in which the Company sold shares of a new series of preferred stock in which the Company receives proceeds of at least \$30.0 million. The conversion rate upon such conversion was 95% of the initial public offering price or 95% of the financing purchase price. If the Company was acquired, the debt would be settled at 120% of the outstanding principal balance or \$36.0 million. On October 17, 2018, in conjunction with the acquisition of the Company by Revolution ("Parties"), the Parties agreed to convert the debt to 18 million shares of Series A Preferred stock or 5.4 million Revolution shares, which had a fair value of \$2.06 per share.

In November 2017, Sanofi provided 90 days' written notice to terminate all oncology programs or the remaining portion of the research activities under the Sanofi Collaboration Agreement, which officially terminated in

February 2018. With the termination of the Sanofi Collaboration Agreement, the maturity date of the convertible notes payable, related party became February 2020.

In June 2018, the Company and Sanofi ("Parties") agreed to amend the terms of the existing convertible notes payable. Per the terms of the amended agreement, all current and future interest due on the convertible notes payable was cancelled and forgiven in full. Additionally, the Parties agreed to exchange the existing convertible notes payable with new notes payable with an extended maturity date and certain other amended provisions immediately prior to a future closing of the Company's first issuance and sale of preferred stock prior to December 31, 2019. As no preferred stock financing occurred prior to the merger between Revolution and the Company (see Note 13), no exchange of notes payable occurred.

The Company recognized a gain on the restructuring of debt, related party due to the cancellation of current and future interest due on the convertible notes payable of \$5.1 million in the nine months ended September 30, 2018. The restructuring of debt was considered a troubled debt restructuring because of the doubt surrounding the Company's ability to continue as a going concern and Sanofi was granting the Company a concession, namely cancelling all current and future interest due on the convertible notes payable.

#### 6. Fair value measurements

Financial Accounting Standards Board Accounting Standards Codification (ASC) 825, Financial Instruments, requires disclosure of the fair value of financial instruments. For financial instruments including cash equivalents, accounts payable and accrued expenses, the carrying amount approximates fair value due to their short-term nature.

ASC 820, Fair Value Measurements and Disclosures (ASC 820), defines fair value and establishes a framework for measuring fair value in accordance with GAAP and expands disclosures about fair value measurements. ASC 820 codifies the definition of fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, clarifies the principle that fair value should be based on the assumptions market participants would use when pricing the asset or liability, and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date.

Fair value measurements are classified and disclosed in one of the following three categories:

Level 1 Quoted prices in active markets for identical assets or liabilities.

Level 2 Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of assets or liabilities.

The Company measures the following financial assets at fair value on a recurring basis. The fair value of these assets was determined as follows at September 30, 2018 and December 31, 2017:

	_	alance at tember 30, 2018	for	ve markets dentical ts (Level 1)	obse in	ther rvable outs rel 2)	unobs in	ificant servable puts /el 3)
Assets:								
Money market funds	\$	414,268	\$	414,268	\$	_	\$	_
Cash equivalents	\$	414,268	\$	414,268	\$	_	\$	_

	Balance at December 31, 2017	ac	oted prices in tive markets or identical assets (Level 1)	ot obse in	ificant ther ervable outs vel 2)	Signif unobse inp (Lev	ervable uts
Assets:							
Money market funds	\$ 18,411,704	\$	18,411,704	\$	_	\$	
Cash equivalents	\$ 18,411,704	\$	18,411,704	\$		\$	

## 7. Prepaid expenses and other current assets

Prepaid expenses and other current assets consist of the following:

	Se	ptember 30, 2018	Dec	ember 31, 2017
Prepaid software licenses	\$	196,113	\$	198,339
Prepaid rent		187,261		172,761
Prepaid maintenance services		160,873		110,314
Other		24,036		46,144
Total prepaid expenses and other current assets		568,283		527,558

## 8. Convertible preferred stock and stockholders' deficit

In January 2016, the Company amended the Limited Liability Company Agreement with its preferred shareholders, and restructured the Company as a C Corporation. In conjunction with the recapitalization, certain put and call rights that the Company's two primarily investors held were eliminated, and the holders of preferred units received an equivalent number of shares of Series A preferred stock. The holders of common units received an equivalent number of common stock.

## Series A convertible preferred stock

The Series A Convertible Preferred Stock ("Series A Preferred Stock") has the following characteristics:

## Voting

The Series A Preferred Stock is entitled to vote together with the common stockholders as one class and are entitled to separate votes on certain matters.

#### Dividends

The Series A stockholders are entitled to receive an annual, cumulative 8% dividend, when and if declared by the Board of Directors. No dividends have been declared through September 30, 2018.

#### Liquidation preference

The Series A stockholders are entitled to a liquidation preference of their original purchase price of \$1.00 per share for Series A Preferred Stock shares, plus accumulated dividends, in the event of liquidation, dissolution, or winding up of the Company. In the event the Company merges with, or is acquired by, another entity, such merger or acquisition could be deemed a dissolution.

#### Conversion

The Series A Preferred Stock is convertible upon approval of the holders of at least 66.66% of the outstanding shares of Series A preferred stock, on a share-for-share basis, subject to certain antidilution adjustments. The Series A preferred stock converts automatically on a share-for-share basis into shares of common stock up on the closing of a qualified initial public offering (IPO), as defined.

#### Redemption rights

The Series A Preferred Stock can be redeemed upon a deemed liquidation, as defined by the articles of incorporation. The preferred stock is otherwise not redeemable.

#### Common stock

Each holder of common stock is entitled to one vote per share of common stock. Subject to the rights of holders of Series A Preferred Stock as described above, holders of common stock are also entitled (i) to receive dividends whenever funds are legally available and when declared by the Board of Directors and (ii) upon a deemed liquidation, to receive ratably and equally with the holders of Series A Preferred Stock all the asset and funds of the Company remaining after the payment to the holders of Series A Preferred Stock of the amounts which they are entitled, as provided above.

## 9. Commitments and contingencies

In May 2017, the Company and the landlord finalized an extension of the Company's facility lease in Cambridge, Massachusetts through February 2023. The lease extension includes a rent increase of approximately 12% starting in March 2018 and three percent annual rent increases through 2023.

#### Operating lease

The Company recorded rent expense of \$1.1 million and \$0.6 million for the nine months ended September 30, 2018 and September 30, 2017, respectively.

As of September 30, 2018, the Company had the following contractual obligations related to its facility lease:

	Operating leases
2018 (remainder)	\$ 402,691
2019	1,659,087
2020	1,700,565
2021	1,751,582
2022	1,804,129
	302,155
	\$ 7,620,209

#### Capital lease obligations

The Company's capital lease obligations amounted to \$0.3 million and \$0.4 million as of September 30, 2018 and December 30, 2017, respectively.

#### Licenses

The Company has entered into certain license agreements. Pursuant to the terms of those agreements, the Company may be required to pay up to \$2.0 million upon the achievement of various developments, regulatory and sales milestones. The payment of these amounts, however, is contingent upon the occurrence of various future events. Additionally, the Company has licensed technology from an academic institution for which it is required to pay annual license payments of \$50,000 for as long as the patent is in effect. If any product related to the licenses technology from an academic institution are approved for sale, the Company may be required to pay a minimal royalty on future sales.

The Cystic Fibrosis Foundation antibiotic grant agreement contains provisions related to potential future amounts payable by the Company to the Cystic Fibrosis Foundation upon product approval and achievement of certain sales milestones. In addition, in the event of a change in control or licensing, sale, or other transfer of the technology, the Company shall pay the Cystic Fibrosis Foundation a payment equal to a percentage of the related transaction price, not to exceed \$1.4 million, which amount shall be reduced by any payments previously made by the Company in connection with a product approval. In conjunction with the acquisition of the Company by Revolution in October 2018, \$1.4 million became due. See Note 13 for more details.

#### 10. Income taxes

#### 2017 U.S. tax reform

On December 22, 2017, the Tax Cuts and Jobs Act (the "TCJA") was signed into United States law. The TCJA includes a number of changes to existing tax law, including, among other things, a permanent reduction in the federal corporate income tax rate from 34% to 21%, effective as of January 1, 2018, as well as limitation of the deduction for net operating losses to 80% of annual taxable income and elimination of net operating loss carrybacks, in each case, for losses arising in taxable years beginning after December 31, 2017 (though any such net operating losses may be carried forward indefinitely). The tax rate change resulted in (i) a reduction in the gross amount of the Company's deferred tax assets recorded as of December 31, 2017, without an impact on the net amount of its deferred tax assets, which are recorded with a full valuation allowance, and (ii) no income tax expense or benefit being recognized as of the enactment date of the TCJA.

In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act ("SAB 118") which allows the Company to record provisional amounts during a

measurement period not to extend beyond one year of the enactment date. During the three and nine months ended September 30, 2018, the Company did not make any adjustments to the provisional amounts recorded as a result of the TCJA. The Company's accounting for the elements of U.S. Tax Reform is complete.

#### Income taxes

During the nine months ended September 30, 2018 and 2017, the Company recorded no income tax benefits for the net operating losses incurred or for the research and development tax credits generated in each period due to its uncertainty of realizing a benefit from those items. The Company has provided a valuation allowance for the full amounts of its net deferred tax assets because, at September 30, 2018 and December 31, 2017, it was more likely than not that any future benefit from deductible temporary differences and net operating loss and tax credit carryforwards would not be realized.

As of September 30, 2018 and December 31, 2017, the Company had not recorded any amounts for unrecognized tax benefits. The statute of limitations for assessment by the Internal Revenue Service ("IRS") and state tax authorities is closed for tax years prior to December 31, 2014, although net operating loss and tax credit carryforwards that were generated prior to December 31, 2014 may still be adjusted upon examination by the IRS and state tax authorities if they either have been or will be used in a future period. There are currently no IRS or state tax audits in progress.

## 11. Related party transactions

In conjunction with the issuance of Series A preferred stock and common stock and the conversion of the prior credit agreement into convertible notes payable (Note 5), the Company simultaneously entered into a research collaboration with Sanofi in 2016 in which it obtained an exclusive license focused on the development of drugs targeting important human oncogenes (Note 4). Under the terms of the Agreement, the Company would lead research collaboration for a period of five years, and Sanofi would potentially receive worldwide exclusive licenses to develop and commercialize the candidates discovered during the research term. The Company has total convertible notes payable from Sanofi of approximately \$30 million and \$34 million as of September 30, 2018 and December 31, 2017, respectively. (See Notes 5 and 13)

The Company leases its facilities from an entity that participated in the Series A Unit financing in October 2012. Prior to and after the restructuring of the Company, the investor owned less than one percent of the Series A Preferred Units and Series A Preferred Stock of the Company, respectively. Payments made to the landlord totaled approximately \$1.2 million and \$1.1 million for the nine months ended September 30, 2018 and 2017, respectively.

## 12. Stock-based compensation

In January 2016, the Company amended the Limited Liability Company Agreement with its preferred shareholders and restructured the Company as a C Corporation. The holders of participation units, the equity award previously given to employees (and to nonemployees on occasion) received an equivalent number of shares of restricted stock on the same vesting schedule. Restricted stock granted by the Company typically vest over four years and have a contractual life of ten years. The following table provides stock-based compensation by the financial statement line item in which it is reflected:

		ths ended nber 30,
	2018	2017
Research and development expense	\$ 55,382	\$ 96,759
General and administrative expense	306,902	411,890
	\$ 362,284	\$ 508,649

The Company granted 310,000 and 577,500 shares of restricted stock to employees during the nine months ended September 30, 2018 and 2017, respectively. For all the grants during the nine months ended September 30, 2018 and 2017, the employees paid the Company the fair value of the restricted awards. As a result, the Company did not recognize any stock-based compensation for the restricted stock grants made during the nine months ended September 30, 2018 and 2017. However, the Company did recognize stock-based compensation related to grants of participation units prior to January 1, 2016.

The Company has utilized significant estimates and assumptions in determining the fair value of its common stock and common units. The Board of Directors determined the estimated fair value of the Company's common stock based on a number of objective and subjective factors, including the lack of an active public market for the Company's common and convertible preferred stock; the prices of shares of the Company's convertible preferred stock that the Company had sold to outside investors in arm's length transactions, and the rights, preferences, and privileges of that convertible preferred stock relative to the Company's common stock; the Company's results of operations and financial condition; the Company's entry into collaboration agreements; the material risks related to the Company's business; the Company's business strategy; the market performance of publicly traded companies in the life sciences and biotechnology sectors; and the likelihood of achieving a liquidity event for the holders of the Company's common stock, such as an initial public offering (IPO), given prevailing market conditions. Significant changes to the key assumptions used in the valuations could have resulted in different fair values of the Company's common stock at each valuation date.

#### 13. Subsequent events

The Company has evaluated subsequent events through September 19, 2019, the date the financial statements were available to be issued.

On October 3, 2018, the Company received \$2 million in cash proceeds from an existing investor in exchange for a convertible promissory note purchase agreement with a maturity date of April 8, 2019 and an 8% annual interest rate.

On October 17, 2018, the Company and Sanofi entered into a Note Conversion Agreement to convert the \$30 million convertible notes payable to 18 million shares of Series A convertible preferred stock of the Company just before the sale pursuant to an Agreement and Plan of Merger with Revolution on October 24, 2018.

On October 24, 2018, the Company and Revolution closed the sale pursuant to an Agreement and Plan of Merger in which Revolution acquired all the Series A convertible preferred stock and the common stock of the Company in exchange for Revolution Series B preferred stock for total consideration valued \$69.0 million, subject to adjustments and holdbacks for certain events.

As a result of the merger agreement, the Cystic Fibrosis Foundation received approximately \$1.4M of Revolution Series B preferred stock in accordance with the contractual terms of the Company's grant agreement with the Cystic Fibrosis Foundation (See Note 9).

## shares



# **Common stock**

J.P. Morgan Cowen SVB Leerink Guggenheim Securities

Prospectus dated , 2020

## PART II

## Information not required in prospectus

## Item 13. Other expenses of issuance and distribution.

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the sale of common stock being registered. All amounts are estimates except for the Securities and Exchange Commission, or SEC, registration fee, the FINRA filing fee and the Nasdaq Global Market listing fee.

Item	Amount paid or to be paid
SEC registration fee	\$ *
FINRA filing fee	*
Nasdaq Global Market Listing fee	*
Printing and engraving expenses	*
Legal fees and expenses	*
Accounting fees and expenses	*
Blue Sky, qualification fees and expenses	*
Transfer Agent fees and expenses	*
Miscellaneous expenses	*
Total	\$

<sup>\*</sup> To be completed by amendment.

#### Item 14. Indemnification of directors and officers.

As permitted by Section 102 of the Delaware General Corporation Law, we have adopted provisions in our amended and restated certificate of incorporation and bylaws that limit or eliminate the personal liability of our directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the corporation, directors exercise an informed business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- · any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- · any act related to unlawful stock repurchases, redemptions or other distributions or payment of dividends; or
- · any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. Our amended and restated certificate of incorporation also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws provide that:

 we shall indemnify our directors and officers, and may indemnify our employees and agents to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions;

- we shall advance expenses to our directors and officers and may advance expenses to our employees and agents in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; and
- the rights provided in our amended and restated bylaws are not exclusive.

Our amended and restated certificate of incorporation, to be attached as Exhibit 3.3 hereto, and our amended and restated bylaws, to be attached as Exhibit 3.5 hereto, provide for the indemnification provisions described above and elsewhere herein. We have entered into separate indemnification agreements with our directors and officers which may be broader than the specific indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements generally require us, among other things, to indemnify our officers and directors against liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct. These indemnification agreements also generally require us to advance any expenses incurred by the directors or officers as a result of any proceeding against them as to which they could be indemnified. In addition, we have purchased a policy of directors' and officers' liability insurance that insures our directors and officers against the cost of defense, settlement or payment of a judgment in some circumstances. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of our officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended, or the Securities Act.

The form of Underwriting Agreement, to be attached as Exhibit 1.1 hereto, provides for indemnification by the underwriters of us and our officers who sign this Registration Statement and directors for specified liabilities, including matters arising under the Securities Act.

#### Item 15. Recent sales of unregistered securities.

The following list sets forth information as to all securities we have sold since January 1, 2016, which were not registered under the Securities Act.

- 1. In February, July, October and December 2016 and April and May 2017, we issued an aggregate of 50,194,267 shares of Series A preferred stock to five accredited investors at a price per share of \$1.00, for a total amount raised of \$50.2 million.
- 2. In March and June 2018, we issued an aggregate of 37,620,613 shares of Series B preferred stock to 17 accredited investors at a price per share of \$1.50, for a total amount raised of \$56.4 million.
- 3. In October 2018, we issued an aggregate of 33,079,554 shares of Series B preferred stock to 91 accredited investors pursuant to our acquisition of Warp Drive Bio, Inc.
- 4. In October 2018, we issued an aggregate of 975,620 shares of Series B preferred stock to one accredited investors at a price per share of \$2.06 pursuant to the conversion of a promissory note.
- 5. In November 2018, we issued an aggregate of 2,119,418 shares of Series B preferred stock to eight accredited investors at a price per share of \$2.06, for a total amount raised of \$4.4 million.
- 6. In June and July 2019, we issued an aggregate of 48,683,038 shares of Series C preferred stock to 34 accredited investors at a price per share of \$2.06, for a total amount raised of \$100.3 million.
- 7. We granted stock options and stock awards to employees, directors and consultants covering an aggregate of 32,481,541 shares of common stock, at a weighted-average exercise price of \$0.59 per share. Of these, options covering an aggregate of 2,119,477 shares were cancelled without being exercised.

8. We sold an aggregate of 8,289,780 shares of common stock to employees, directors and consultants for cash consideration in the aggregate amount of \$1.1 million pursuant to stock options and restricted stock awards.

We claimed exemption from registration under the Securities Act for the sale and issuance of securities in the transactions described in paragraphs (1) through (5) by virtue of Section 4(a)(2) and/or Regulation D promulgated thereunder as transactions not involving any public offering. All of the purchasers of unregistered securities for which we relied on Section 4(a)(2) and/or Regulation D represented that they were accredited investors as defined under the Securities Act. We claimed such exemption on the basis that (a) the purchasers in each case represented that they intended to acquire the securities for investment only and not with a view to the distribution thereof and that they either received adequate information about the registrant or had access, through employment or other relationships, to such information and (b) appropriate legends were affixed to the stock certificates issued in such transactions.

We claimed exemption from registration under the Securities Act for the sales and issuances of securities in the transactions described in paragraphs (6) and (7) above under Section 4(a)(2) of the Securities Act in that such sales and issuances did not involve a public offering or under Rule 701 promulgated under the Securities Act, in that they were offered and sold either pursuant to written compensatory plans or pursuant to a written contract relating to compensation, as provided by Rule 701.

Item 16. Exhibits and financial statement schedules.

### (a) Exhibits.

		Incor	oorated by	reference	
Exhibit number	Exhibit description	Form	Date	Number	Filed herewith
1.1*	Form of Underwriting Agreement.				
2.1	Agreement and Plan of Merger, dated as of October 15, 2018, by and among Revolution Medicines, Inc., Trotsky Merger Sub, Inc., Warp Drive Bio, Inc., and Fortis Advisors LLC.	DRS	10/30/19	2.1	
3.1	Amended and Restated Certificate of Incorporation, as amended, currently in effect.	DRS	10/30/19	3.1	
3.2*	Amended and Restated Certificate of Incorporation, effecting a stock split.				
3.3*	Form of Amended and Restated Certificate of Incorporation, to be in effect immediately prior to the consummation of this offering.				
3.4	Bylaws, currently in effect.	DRS	10/30/19	3.4	
3.5*	Form of Amended and Restated Bylaws, to be in effect immediately prior to the consummation of this offering.				
4.1*	Reference is made to Exhibits 3.1 through 3.5.				
4.2*	Form of Common Stock Certificate.				
5.1*	Opinion of Latham & Watkins LLP.				
10.1†	Collaborative Research, Development and Commercialization Agreement, dated as of June 8, 2018, by and between Revolution Medicines, Inc. and Aventis, Inc., as amended.	DRS	9/19/19	10.1	

		Inco			
Exhibit number	Exhibit description	Form	Date	Number	Filed herewith
10.2	Amended and Restated Investors' Rights Agreement, dated as of June 5, 2019, by and among Revolution Medicines, Inc. and the investors listed therein.	DRS	10/30/19	10.2	
10.3A	Lease between HCP LS Redwood City, LLC and Revolution Medicines, Inc., dated as of January 15, 2015.	DRS	10/30/19	10.3A	
10.3B	First Amendment to Lease by and between HCP LS Redwood City, LLC and Revolution Medicines, Inc., dated as of September 16, 2016.	DRS	10/30/19	10.3B	
10.3C	Sublease between OncoMed Pharmaceuticals, Inc. and Revolution Medicines, Inc., dated as of January 16, 2019.	DRS	10/30/19	10.3C	
10.4A	Lease Agreement between Are-Tech Square, LLC and Warp Drive Bio, LLC, dated as of August 22, 2012.	DRS	10/30/19	10.4A	
10.4B	First Amendment to Lease by and between Are-Tech Square, LLC and Warp Drive Bio, Inc., dated as of May 18, 2017.	DRS	10/30/19	10.4B	
10.5A	Assignment and Assumption of Lease by and between Warp Drive Bio, LLC and Revolution Medicines, Inc., dated as of January 30, 2019.	DRS	10/30/19	10.5A	
10.5B	Sublease Agreement between Revolution Medicines, Inc., as successor to Warp Drive Bio, LLC, and Casma Therapeutics, Inc., dated as of February 4, 2019.	DRS	10/30/19	10.5B	
10.6(a)#	2014 Equity Incentive Plan, as amended.	DRS	10/30/19	10.6(a)	
10.6(b)#	Form of Amended and Restated Early Exercise Stock Option Grant Notice and Amended and Restated Stock Option Agreement under 2014 Equity Incentive Plan, as amended.	DRS	10/30/19	10.6(b)	
10.7(a)#*	2020 Incentive Award Plan.			. ,	
10.7(b)#*	Form of Stock Option Grant Notice and Stock Option Agreement under the 2020 Incentive Award Plan.				
10.7(c)#*	Form of Restricted Stock Award Agreement under the 2020 Incentive Award Plan.				
10.7(d)#*	Form of Restricted Stock Unit Award Grant Notice under the 2020 Incentive Award Plan.				
10.8#*	2020 Employee Stock Purchase Plan.				
10.9#*	Offer Letter by and between Revolution Medicines, Inc. and Mark A. Goldsmith, M.D., Ph.D.				
10.10#*	Offer Letter by and between Revolution Medicines, Inc. and Steve Kelsey, M.D., FRCP, FRCPath.				
10.11#*	Offer Letter by and between Revolution Medicines, Inc. and Margaret Horn, J.D.				

1		Incorpo	ated by	reference	
Exhibit number	Exhibit description	Form	Date	Number	Filed herewith
10.12#*	Non-Employee Director Compensation Program.				
10.13*	Form of Indemnification Agreement for directors and officers.				
21.1*	Subsidiaries of Registrant.				
23.1*	Consent of Independent Registered Public Accounting Firm.				
23.2*	Consent of Independent Auditors.				
23.3*	Consent of Independent Auditors.				
23.4*	Consent of Latham & Watkins LLP (included in Exhibit 5.1).				
24.1*	Power of Attorney. Reference is made to the signature page to the Registration Statement.				

<sup>\*</sup> To be filed by amendment.

(b) Financial Statement Schedules. Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes thereto.

#### Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

- 1. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
- 2. For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

<sup>†</sup> Portions of the exhibit, marked by brackets, have been omitted because the omitted information (i) is not material and (ii) would likely cause competitive harm if publicly disclosed.

<sup>#</sup> Indicates management contract or compensatory plan.

## **Signatures**

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement on Form S-1 to be signed on its behalf by the undersigned, thereunto duly authorized, in Redwood City, California on , 2020.

Revolution Medicines, Inc.

Ву:		
	Mark A. Goldsmith, M.D., Ph.D.	
	President and Chief Executive Officer	

## **Power of attorney**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Mark A. Goldsmith, M.D., Ph.D., Margaret A. Horn and Jack Anders, and each of them acting individually, as his or her true and lawful attorneys-in-fact and agents, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Registration Statement, including post-effective amendments or any abbreviated registration statement and any amendments thereto filed pursuant to Rule 462(b) increasing the number of securities for which registration is sought, and to file the same, with all exhibits thereto and other documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, with full power of each to act alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
Mark A. Goldsmith, M.D., Ph.D.	President, Chief Executive Officer and Director (Principal Executive Officer)	, 2020
Jack Anders	Vice President, Finance and Principal Accounting Officer (Principal Financial and Accounting Officer)	, 2020
Elizabeth McKee Anderson	Director	, 2020
Alexis Borisy	Director	, 2020
Neil Exter	Director	, 2020

Signature	Title	Date
Larry Lasky, Ph.D.	—— Director	, 2020
Vincent A. Miller, M.D.	—— Director	, 2020
Thilo Schroeder, Ph.D.	—— Director	, 2020
Barbara Weber, M.D.	—— Director	, 2020