UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 1 TO FORM S-1 REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

RAPT THERAPEUTICS, INC.

Delaware (State or other jurisdiction of incorporation or organization)

2834 (Primary Standard Industrial Classification Code Number)

561 Eccles Avenue

47-3313701 (I.R.S. Employer Identification Number)

South San Francisco, California 94080 (650) 489-9000 (Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

> Brian Wong, M.D., Ph.D. President and Chief Executive Officer RAPT Therapeutics, Inc. 561 Eccles Avenue South San Francisco, California 94080 (650) 489-9000

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if any of the securities being registered on this form are to be offered on a delayed of continuous basis pursuant to Rule 415 under the Securities Act of 1955, as amended, 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, 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(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. \square
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, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

Large accelerated filer Accelerated filer

X Non-accelerated filer Smaller reporting company

X Emerging growth company

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

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities To Be Registered	Amount to be registered(1)	Proposed Maximum Offering Price per Share	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee(3)
Common Stock, \$0.0001 par value per share	5,750,000	\$16.00	\$92,000,000	\$11,150.40

- Includes 750,000 shares that the underwriters have the option to purchase.
- Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(a) under the Securities Act of 1933, as amended. Of this amount, \$10,453.50 was previously paid.

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, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange 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 prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion Preliminary Prospectus dated July 22, 2019

PROSPECTUS

5,000,000 Shares THERAPEUTICS Common Stock

This is RAPT Therapeutics, Inc.'s initial public offering. We are selling 5,000,000 shares of our common stock.

We expect the initial public offering price to be between \$14.00 and \$16.00 per share. Currently, no public market exists for the shares of our common stock. After pricing of the offering, we expect that the shares will trade on the Nasdaq Global Market under the symbol "RAPT."

We are an "emerging growth company" as defined under the U.S. federal securities laws and, as such, may elect to comply with certain reduced public company reporting requirements for this and future filings. See "Prospectus Summary—Implications of Being an Emerging Growth Company."

Investing in our common stock involves risks that are described in the "Risk Factors" section beginning on page 13 of this prospectus.

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

(1) See "Underwriting" beginning on page 182 for additional information regarding underwriting compensation.

The underwriters may also exercise their option to purchase up to an additional 750,000 shares of common stock from us, at the initial public offering price, less the underwriting discount, for 30 days after the date of this prospectus.

Certain existing stockholders have indicated an interest in purchasing up to approximately \$25.0 million of shares of our common stock in this offering at the initial public offering price. However, because these indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any or all of these stockholders, or any or all of these stockholders may determine to purchase more, less or no shares in this offering. The underwriters will receive the same underwriting discount on any shares purchased by these stockholders as they will on any other shares sold to the public in this offering.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The shares of commo	on stock will be ready for delivery on or ab	out , 2019.	
BofA Merrill Lynch	Wells Fargo Securities	BMO Capital Markets	UBS Investment Bank
	The date of this prosp	ectus is 2019	

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Through and including , 2019 (25 days after the date of this prospectus), all dealers effecting transactions in our common stock, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to unsold allotments or subscriptions.

We have not and the underwriters have not authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. 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 are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock. Our business, financial condition, results of operations and future growth prospects may have changed since that date.

For investors outside the United States: Neither we nor any of the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of our common stock and the distribution of this prospectus outside of the United States.

PROSPECTUS SUMMARY

This summary highlights selected information, presented in greater detail 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, including the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the related notes included elsewhere in this prospectus, before making an investment decision. Unless the context otherwise requires, all references in this prospectus to "we," "us," "our," "the company" and "RAPT" refer to RAPT Therapeutics, Inc.

Overview

We are a clinical-stage immunology-based biopharmaceutical company focused on discovering, developing and commercializing oral small molecule therapies for patients with significant unmet needs in oncology and inflammatory diseases. Utilizing our proprietary drug discovery and development engine, we are developing highly selective small molecules designed to modulate the critical immune responses underlying these diseases. In our first four years since inception, we have discovered and advanced two unique drug candidates each targeting C-C motif chemokine receptor 4 ("CCR4"). Our lead oncology drug candidate, FLX475, reached the clinic in just two and a half years and we expect our lead inflammation drug candidate, RPT193, to enter the clinic in the second half of 2019. We are also pursuing a range of targets, including general control nonderepressible 2 ("GCN2") and hematopoietic progenitor kinase 1 ("HPK1"), that are in the discovery stage of development.

The following chart summarizes the status of the drug candidates in our current pipeline.

Our Pipeline: Highly Selective Oral Compounds Targeting Critical Immune Drivers

PR	OGRAM	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	Anticipated Program Milestone
rogram	FLX475 Cancer		by - selected tumor type truda (PD-1) – selected				PoC: 1H 2020
CCR4 Program	RPT193 Inflammation	Atopic Dermatitis** Asthma and Other Allergic Diseases**					PoC: Mid-2020
RPT-GCN2i		Solid Tumors					IND Filing: 2020
HPK1		Solid Tumors					

Investigational New Drug application ("IND") submitted in May 2018 to treat multiple "charged" tumor types including non-small cell lung cancer, triple negative breast cancer, head and neck squamous cell carcinoma, nasopharyngeal cancer, gastric cancer, certain Hodgkin and non-Hodgkin lymphomas and cervical cancer.

** Initial Phase 1 study in healthy volunteers and patients with atopic dermatitis estimated to start in 2H 2019. Our Clinical Trial Application ("CTA") in Europe was accepted in July 2019. Subsequent Phase 2 studies may include additional allergic diseases beyond atopic dermatitis, including asthma, chronic urticaria (skin rash), allergic conjunctivitis, chronic rhinosinusitis and eosinophilic esophagitis (inflammation of the esophagus).

Our CCR4 Franchise

Our proprietary drug discovery and development engine has identified the cell surface receptor CCR4 as a drug target that potentially has broad applicability in oncology and inflammatory diseases. Receptors such as CCR4 bind to chemoattractant molecules called chemokines that orchestrate migration and homing of immune cells to specific tissues throughout the body. Chemokines specific for CCR4 are secreted from tumors and from allergically-inflamed tissues, but are not highly expressed in healthy tissues. Our approach is designed to enable selective restoration of the immune response within tumor and allergically inflamed tissues without systemically depleting immune cells and broadly suppressing the immune system. Each of our two unique drug candidates, FLX475 and RPT193, target CCR4 in a manner we believe is well suited for cancer and inflammatory disease, respectively.

CCR4 Antagonist for Oncology: FLX475

We are developing FLX475 for the treatment of a broad range of "charged" tumors, which represent cancer types we believe are most likely to respond to FLX475. In cancer, the secretion of certain chemokines from tumor cells and tumor-resident immune cells is responsible for recruitment of immunosuppressive regulatory T cells (" T_{reg} ") to tumor sites. T_{reg} represent a dominant pathway for downregulating the immune response, and thus may limit the effectiveness of currently available therapies such as checkpoint inhibitors. Therefore, blocking the migration of T_{reg} has the potential to restore naturally-occurring antitumor immunity as well as to synergize with a variety of both conventional and immune-based therapies, such as radiation, chemotherapy, checkpoint inhibitors, immune stimulators and adoptive T cell therapy. We believe that the inhibition of CCR4 has the potential to bring therapeutic benefit to patients across a wide spectrum of tumors in a manner similar to other immuno-oncology therapies that have been shown to be effective against multiple tumor types, while also potentially deepening or broadening clinical responses to these therapies.

Our proprietary drug discovery and development engine has identified certain tumors in which the abundance of T_{reg} is likely to be a cause of immune suppression. We refer to these tumors as "charged," as defined by high levels of (i) CCR4 ligands, (ii) T_{reg} and (iii) CD8+ effector cells. These "charged" tumors include tumor types such as non-small cell lung cancer, triple negative breast cancer, head and neck squamous cell carcinoma, nasopharyngeal cancer, gastric cancer, certain Hodgkin and non-Hodgkin lymphomas, and cervical cancer. Additionally, we have discovered that the presence of oncogenic viruses, such as Epstein-Barr virus and human papillomavirus, is associated with tumors that are highly "charged" and allows prospective patient selection.

FLX475 is a small molecule CCR4 antagonist designed to block the migration of T_{reg} specifically into tumors, but not healthy tissues, without depleting T_{reg} throughout the body, which we believe may decrease the likelihood of side effects. We have completed a placebo-controlled, double-blinded dose-escalating Phase 1 clinical trial of FLX475 in 104 healthy volunteers. FLX475 was well tolerated and demonstrated dose-dependent inhibition of CCR4 with no observed immune-related adverse events or significant clinical adverse events. Daily dosing within the single dose arm ranged between 5 mg and 1,000 mg and in the multiple dose arm between 25 mg and 150 mg a day for 14 days. At the 75 mg daily dose, FLX475 exceeded the targeted receptor occupancy in six out of six healthy volunteers, which, in our preclinical studies, corresponded with a 90% inhibition of in vitro T_{reg} migration and the highest level of inhibition of in vivo T_{reg} migration and antitumor activity. We are currently enrolling a Phase 1/2 trial of FLX475 as a monotherapy, and in combination with pembrolizumab (marketed as Keytruda), in patients with "charged" tumors and anticipate results from the Phase 2 portion of the trial could provide clinical proof-of-concept ("PoC") data in the first half of 2020.

In preclinical studies, FLX475 caused a 56-78% reduction in T_{reg} recruitment into tumors in two out of two experiments in mice. In contrast, CCR4 antagonism did not cause T_{reg} reductions in skin, blood, or lymphoid organs in seven out of seven mice in two out of two experiments. This reduction of T_{reg} recruitment by tumors in mice was sufficient to increase effector immune cells (CD8+) by an average of 3 fold (ranging from 1.7 to 4.1 fold in individual mice). In addition, in preclinical tumor models, use of our CCR4 antagonist as a single agent resulted in tumor growth inhibition comparable to an immune checkpoint inhibitor in three out of four experiments. In combination with checkpoint inhibitors, our CCR4 antagonist led to tumor reduction and eradication greater than checkpoint inhibitors alone and did not appear to negatively impact effector immune cells.

We hold worldwide rights to FLX475 and own an issued U.S. composition of matter patent with respect to FLX475 that is scheduled to expire in 2037.

CCR4 Antagonist for Allergic Inflammatory Disease: RPT193

RPT193 is a small molecule CCR4 antagonist that blocks the recruitment of inflammatory immune cells, known as type 2 T helper cells ("Th2 cells"), which are clinically implicated in allergic inflammatory diseases. We are developing RPT193 for the treatment of a broad range of allergic inflammatory diseases, the first of which is atopic dermatitis ("AD"), a chronic, inflammatory skin disease characterized by skin barrier disruption and immune dysregulation. We intend to initiate a first-in-human trial in the second half of 2019 starting with Phase 1a single and multiple dose escalation cohorts in healthy volunteers followed by placebo-controlled Phase 1b testing in patients with moderate to severe AD. We refer to this trial design as "seamless" given it will start with healthy volunteers and then transition directly into a cohort of patients with AD. Our CTA in Europe was accepted in July 2019 and we plan to submit an IND in the United States in the third quarter of 2019 for this Phase 1 trial. We anticipate PoC clinical results from the Phase 1b portion of this study by mid-2020.

While there are marketed injectable products for the treatment of AD, as well as oral and injectable drug candidates in development, we believe there is an unmet need for a safe and effective oral treatment. In preclinical studies, oral administration of RPT193 resulted consistently in statistically significant (p < 0.05) reduction of inflammation in allergic skin (nine out of nine experiments) and airway inflammation models (two out of two experiments). In five of five preclinical experiments in mice, in a head-to-head comparison, we observed that the activity of oral RPT193 was similar to that observed with an anti-IL13 antibody. We believe based on our preclinical pharmacology and Good Laboratory Practice ("GLP") toxicology results, if confirmed in clinical trials, combined with the convenience of once daily oral dosing, RPT193 could fill an unmet medical need for the treatment of allergic disorders.

CCR4 is highly expressed on Th2 cells. In allergic inflammatory diseases, including AD, chemokines recruit Th2 cells via CCR4 into inflamed tissues. Once Th2 cells enter tissues such as the skin or the airways in the lung, they secrete proteins known to drive the inflammatory response. The role of Th2 cells has been clinically validated by, among others, dupilumab, an injectable biologic targeting this pathway. Further evidence of CCR4's role in AD includes the observation of higher levels of CCR4 ligands in AD patients compared with healthy humans; these ligands also correlate with the severity of disease. We believe that by inhibiting CCR4, RPT193 has the potential to bring therapeutic benefit to patients across a broad spectrum of additional allergic inflammatory diseases, including asthma, chronic urticaria (skin rash), allergic conjunctivitis, chronic rhinosinusitis and eosinophilic esophagitis (inflammation of the esophagus).

We are developing RPT193 initially in AD because there is:

- an unmet need for a safe and effective oral treatment;
- a potentially efficient path to PoC, due to high prevalence of disease and short time to clinically relevant endpoints;

- a well-defined set of clinical endpoints that have historically been accepted for regulatory approval, which are usable for PoC as well as for subsequent pivotal studies;
- · easy access to patient samples, such as skin biopsies, to interrogate mechanisms of action and clinical biomarkers of efficacy; and
- a precedent that PoC in AD has translated to other Th2 driven allergic inflammatory diseases.

We hold worldwide rights to RPT193 and have pending patent applications with respect to RPT193 that, if issued, would be scheduled to expire in 2039.

GCN2 and HPK1 Programs for Oncology

GCN2 is a fundamental driver of immune suppression and the survival of tumor cells under the conditions of metabolic stress typically seen in the tumor microenvironment. Preclinical studies have shown that the inhibition of GCN2 can result in tumor cell death in vitro and restoration of immune function under these stress conditions. The GCN2 pathway is generally not active in healthy tissue suggesting the potential for a favorable therapeutic index for drugs targeting GCN2. Preclinical in vitro studies have demonstrated that a potential inhibitor of GCN2 (an "RPT-GCN2i") has the ability to increase T cell proliferation and function in nutrient-deprived conditions to levels comparable to T cells cultured in non-nutrient-deprived conditions (six out of six studies). An RPT-GCN2i also reduced immune suppression induced by myeloid-derived suppressor cells as measured by an increase in T cell proliferation (by 80-148% of control in immune cells from five out of five human donors). Preclinical in vivo studies demonstrated that oral administration of an RPT-GCN2i elicited consistent (four out of four experiments) antitumor responses in animal models. We are developing an RPT-GCN2i with the intent of filing an IND with the FDA in 2020.

HPK1 is a negative regulator of T cell activation, and the inhibition of HPK1 has the potential to enhance T cell function and antitumor activity.

Our Proprietary Drug Discovery and Development Engine

Through the deep expertise of our team in immunology and drug discovery, supported by advanced computational biology, we are developing the ability to exploit difficult targets, including through proprietary know-how. We refer to this as our "proprietary drug discovery and development engine." This engine is built upon the following four key pillars:

- computationally-driven disease target and biomarker identification;
- efficient design of small molecule drug properties;
- · data-driven patient selection; and
- nimble clinical execution.

We believe that the drug candidates generated from this engine, if approved, will significantly improve the treatment paradigms and outcomes for patients by fundamentally modulating the immune responses in a range of cancers and inflammatory diseases.

Our Team and Investors

Our management and scientific teams and scientific advisory board have substantial expertise in three areas key to our success: immunology, small molecule drug discovery and development and computational

biology. Collectively, our executives have contributed to the research and development of multiple drugs, including Gazyva, Venclexta, Tavalisse, Actemra, Provenge and Xgeva.

We have assembled a leadership team and advisory group with a proven track record of success, and a team of scientists with substantial knowledge and expertise especially in human immune biology and also in the drug discovery and development and translational areas essential to execute on this approach. Our President and Chief Executive Officer, Brian Wong, M.D., Ph.D., previously served as Senior Vice President, Research, and Head of Immuno-Oncology at Five Prime Therapeutics and Director of Research in the Inflammation Disease Biology Area at Roche. William Ho, M.D., Ph.D., our Chief Medical Officer, previously led clinical development at Igenica Biotherapeutics and the development of multiple products at Genentech including Gazyva and Venclexta. Our Chief Scientific Officer, Dirk Brockstedt, Ph.D., previously served as Executive Vice President of Research and Development at Aduro Biotech. Our Vice President, Quantitative and Computational Biology, Paul Kassner, Ph.D., previously served as Director of Research and Head of the Genome Analysis Unit at Amgen. Before joining RAPT, our Senior Vice President of Drug Discovery and Preclinical Development, David Wustrow, Ph.D., most recently served as Vice President, Chemical and Pharmaceutical Sciences at Cleave Biosciences. Our Vice President, Finance and Corporate Controller, Karen C. Lam, previously served as Senior Director, Controller of True North Therapeutics and Director, Controller at iPierian and Ms. Lam is a Certified Public Accountant (inactive). Our Vice President, Human Resources, Erin Campany, previously served as Head of Human Resources at Immune Design and Senior Director, Global Human Resources at Acorda Therapeutics.

Our management team is supported by a scientific advisory board comprised of leading clinicians and scientific researchers, including Alexander Rudensky, Ph.D. (Memorial Sloan Kettering Cancer Center); Antoni Ribas, M.D., Ph.D. (UCLA); Scott Antonia, M.D., Ph.D. (Duke University); Drew Pardoll, M.D., Ph.D. (Johns Hopkins University); Philip Greenberg, M.D., Ph.D. (Fred Hutchinson Cancer Research Center); Robert Zamboni, Ph.D. (McGill University); Emma Guttman-Yassky, M.D., Ph.D. (Mt. Sinai) and David Goeddel, Ph.D. (The Column Group). Our clinical advisors also include Jasmina Jankicevic, M.D. (Premier Research); Thomas Bieber, M.D. (University of Bonn, Germany); and Andrew Blauvelt, M.D., M.B.A. (Oregon Medical Research Center).

We are backed by leading corporate and institutional investors, including The Column Group, GV, Kleiner Perkins, Topspin Partners and Celgene Corporation.

Our Strategy

- Advance our lead candidate, FLX475, through clinical development to commercialization in "charged" tumor types, which represent cancer types we believe are most likely to respond to FLX475. We expect to rapidly evaluate FLX475's efficacy in multiple tumor types both as a single agent and in combination with other immuno-oncology agents such as programmed cell death 1 ("PD-1") checkpoint inhibitor. Our goal is to expeditiously progress into registration trials to ultimately enable treatment of cancer patients for whom current treatments are inadequate.
- Enhance the impact of RPT193 by expanding development across multiple allergic diseases. We are initially developing RPT193 for AD because the characteristics of the disease present an opportunity to rapidly demonstrate RPT193's anti-inflammatory effect. We believe this anti-inflammatory effect, along with its convenient oral administration and good preclinical safety profile, has potential clinical translatability in a variety of allergic diseases beyond AD.
- **Develop and advance a preclinical GCN2 inhibitor into clinical trials.** We view our preclinical programs as important drivers of long-term growth and stability of our company. Our goal is to

rapidly advance our programs to generate validating preclinical data that warrant clinical development.

- Expand our pipeline by leveraging our proprietary drug discovery and development engine and small molecule expertise. We believe there are additional identifiable targets that will be important to fundamentally modulate the immune response in the treatment of cancer and inflammatory diseases. We will continue to invest in our proprietary drug discovery and development engine and investigate several of our identified targets as well as generate additional target and drug candidates, including a future HPK1 drug candidate.
- **Utilize collaborations in support of our long-term goals.** We plan to selectively use collaborations and partnerships as strategic tools to maximize the value of our drug candidates.

Risks Associated with Our Business

We have performed preclinical studies in mouse models to examine the potential mechanism of action, toxicity and therapeutic activity of our drug candidates. By the nature of such experiments, there is variability in the degree and ranges of results observed, and the statistical significance of the findings from each experiment. For specific details on how the studies were conducted, ranges of results observed and statistical significance of the findings, see the section titled "Business." Data from preclinical studies should always be interpreted with caution, as results in preclinical studies do not necessarily predict the results in clinical studies.

Our business is subject to numerous risks and uncertainties, including those highlighted in the section titled "Risk Factors" immediately following this prospectus summary. These risks include, among others, the following:

- We are a clinical stage biopharmaceutical company with a history of losses. We expect to continue to incur significant losses for the
 foreseeable future and may never achieve or maintain profitability, which could result in a decline in the market value of our
 common stock.
- FLX475 and RPT193 are in clinical and preclinical development, respectively, and may fail in development or suffer delays that materially and adversely affect their commercial viability.
- If RPT193 or an RPT-GCN2i or other future drug candidate is tested in humans, it may not demonstrate the safety and efficacy necessary to support further development or commercial viability.
- We may not be successful in our efforts to use and expand our proprietary drug discovery and development engine to build a pipeline of drug candidates, and as an organization we have no history of successfully developing drugs.
- If we or others later identify undesirable side effects caused by FLX475 or RPT193, our ability to market and derive revenue from the drug candidate could be compromised.
- Even if we consummate this offering, we will need substantial additional funds to advance development of drug candidates and our proprietary drug discovery and development engine, and we cannot guarantee that we will have sufficient funds available in the future to develop and commercialize our current or potential future drug candidates.
- If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.
- We face intense competition from entities that have developed or may develop drug candidates for the treatment of the diseases that
 we are currently targeting or may target in the future. If these companies develop technologies or drug candidates more rapidly than
 we do, or if their technologies or drug candidates are more effective than our candidates, our ability to develop and successfully
 commercialize drug candidates may be adversely affected.

- If third parties on which we rely to conduct certain preclinical studies and clinical trials do not perform as contractually required, fail to satisfy regulatory or legal requirements or miss expected deadlines, our development program could be delayed with material and adverse impacts on our business and financial condition.
- We may experience difficulties in managing our growth and expanding our operations.
- We may not be able to enter into collaborations or strategic transactions on acceptable terms, if at all, which could adversely affect
 our ability to develop and commercialize current and potential future drug candidates, impact our cash position and increase our
 expenses.
- If we are unable to obtain, maintain, enforce or defend intellectual property rights related to our technology and current or future drug candidates, or if our intellectual property rights are inadequate, we may not be able to compete effectively.
- Clinical development includes a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials
 may not be predictive of future trial results.

Corporate Information

We were incorporated under the laws of the state of Delaware in March 2015 under the name FLX Bio, Inc. In April 2015, Flexus Biosciences, Inc. ("Flexus") contributed and assigned to us the assets and rights relating primarily to its fms-like tyrosine kinase receptor 3, cyclin-dependent kinase 4/6 inhibitor and small molecule T_{reg} cancer immunotherapy in exchange for shares of our convertible preferred stock, which were immediately distributed to the preferred stockholders of Flexus. In May 2019, we changed our name to RAPT Therapeutics, Inc. Our principal executive offices are located at 561 Eccles Avenue, South San Francisco, California 94080. Our telephone number is (650) 489-9000. Our website address is www.rapt.com. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider information contained on, or that can be accessed through, our website to be part of this prospectus or in deciding whether to purchase our common stock.

RAPT, the RAPT logo and our other registered or common law trade names, trademarks or service marks appearing in this prospectus are the property of RAPT Therapeutics, Inc. Trade names, trademarks and service marks of other companies appearing in this prospectus are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or TM symbols.

Implications of Being an Emerging Growth Company

As a company with less than \$1.07 billion in revenues during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act (the "JOBS Act"), enacted in April 2012. An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- not being required to comply for a certain period of time with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended (the "Sarbanes-Oxley Act");
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and

 exemptions from the requirements of holding a stockholder advisory vote on executive compensation and any golden parachute payments not previously approved.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

In addition, pursuant to the JOBS Act, as an "emerging growth company" we have elected to take advantage of an extended transition period for complying with new or revised accounting standards. As a result, we will not be subject to the same new or revised accounting standards as other public companies that comply with the public company effective dates, including but not limited to the new lease accounting standard. This effectively permits us to delay adoption of certain accounting standards until those standards would otherwise apply to private companies. As a result, our consolidated financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make our common stock less attractive to investors.

We may take advantage of these provisions until the last day of our fiscal year following the fifth anniversary of the date of the first sale of our common stock in this offering. However, if certain events occur prior to the end of such five-year period, including if (i) we become a "large accelerated filer," with at least \$700 million of equity securities held by non-affiliates; (ii) our annual gross revenues exceed \$1.07 billion; or (iii) we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an "emerging growth company" prior to the end of such five-year period.

The Offering

Common stock offered by us

5,000,000 shares

Common stock to be outstanding after this offering

22,750,380 shares

Underwriters' option to purchase additional shares of

750,000 shares

common stock

Use of proceeds

We estimate that the net proceeds from the sale of our common stock in this offering will be approximately \$66.0 million (or approximately \$76.4 million if the underwriters exercise their over-allotment option in full), based on the assumed initial public offering price of \$15.00 per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

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

- Approximately \$20.0 million to \$25.0 million to fund the development of FLX475 beyond PoC results from our Phase 1/2 clinical trial;
- Approximately \$20.0 million to \$25.0 million to fund the development of RPT193 beyond our Phase 1 trial in healthy volunteers and patients with AD; and
- The remaining proceeds for continued development of our GCN2 and HPK1 programs, continued refinement of our proprietary drug discovery and development engine, hiring of additional personnel, capital expenditures, costs of operating as a public company and other general corporate purposes.

See "Use of Proceeds" for additional information.

Risk factors

See "Risk Factors" for additional information and a discussion of factors you should carefully consider before deciding to invest in our common stock.

Reserved share program

At our request, the underwriters have reserved up to 5% of the shares offered by this prospectus, for sale at the initial public offering price in a reserved share program, to our directors, officers, employees, consultants and related persons. See Underwriting—Reserved Shares."

Proposed trading symbol on the Nasdaq Global Market "RAPT"

The number of shares of our common stock that will be outstanding after this offering is based on 17,750,380 shares of our common stock (including shares of our convertible preferred stock on an as-converted basis) outstanding as of March 31, 2019, and excludes:

- 545,253 shares of our common stock issuable upon conversion of our Series C-2 convertible preferred stock sold in June 2019;
- 971,496 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock issued under our 2015 Stock Plan, as amended ("2015 Plan"), and outstanding as of March 31, 2019, with a weighted-average exercise price of \$4.99 per share;
- 130,830 shares of our common stock issuable upon the exercise of stock options granted after March 31, 2019, with an exercise price of \$13.62 per share, and an additional 173,079 shares of our common stock issuable upon the exercise of stock options granted after March 31, 2019, with an exercise price equal to the public offering price set forth on the cover page of this prospectus;
- 3,481,819 shares of our common stock reserved for future issuance under our 2019 Equity Incentive Plan ("2019 Plan") (including 617,194 shares of our common stock reserved for issuance as of July 15, 2019, under our 2015 Plan that will be added to our 2019 Plan reserve upon its effectiveness), which includes an annual evergreen increase and will become effective in connection with this offering; and
- 240,336 shares of our common stock reserved for future issuance under our 2019 Employee Stock Purchase Plan ("ESPP"), which includes an annual evergreen increase and will become effective in connection with this offering.

Unless otherwise indicated, the information in this prospectus reflects and assumes the following:

- an initial public offering price of \$15.00 per share, which is the midpoint of the estimated offering price range set forth on the cover page of this prospectus;
- the one-for-six reverse stock split for our common stock and a proportional adjustment to the conversion ratio of our convertible preferred stock effected on July 19, 2019;
- no exercise of the outstanding options described above;
- no exercise of the underwriters' option to purchase up to an additional 750,000 shares of our common stock to cover overallotments; and
- 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 upon the closing of this offering.

Certain existing stockholders have indicated an interest in purchasing up to approximately \$25.0 million of shares of our common stock in this offering at the initial public offering price. However, because these indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any or all of these stockholders, or any or all of these stockholders may determine to purchase more, less or no shares in this offering. The underwriters will receive the same underwriting discount on any shares purchased by these stockholders as they will on any other shares sold to the public in this offering.

Summary Consolidated Financial Data

The following tables set forth a summary of our historical consolidated financial data as of, and for the periods ended on, the dates indicated. The consolidated statements of operations data for the fiscal years ended December 31, 2017 and 2018, and the consolidated balance sheet data as of December 31, 2017 and 2018, are derived from our audited consolidated financial statements and related notes included elsewhere in this prospectus. The consolidated statements of operations data for the three months ended March 31, 2018 and 2019 and the consolidated balance sheet data as of March 31, 2019 are derived from our unaudited condensed consolidated financial statements and related notes included elsewhere in this prospectus. You should read this data together with our consolidated financial statements and related notes appearing elsewhere in this prospectus and the information in "Selected Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations." Our historical results are not necessarily indicative of the results to be expected in the future, and the results for the three months ended March 31, 2019 are not necessarily indicative of the results to be expected for the full year or any other period.

	Year ended December 31,		Three months ended March 31,	
	<u>2017</u>	2018	2018	2019
Consolidated Statements of Operations Data:		(in thousands, excep	t per share data)	
Operating costs and expenses:				
Research and development	\$ 25,618	\$ 31,767	\$ 7,306	\$ 7,870
General and administrative	3,713	5,180	1,057	1,674
Total operating expenses	29,331	36,947	8,363	9,544
Loss from operations	29,331	36,947	8,363	9,544
Other (income), net	(216)	(800)	(132)	(356)
Net loss	\$ 29,115	\$ 36,147	\$ 8,231	\$ 9,188
Net loss per share, basic and diluted(1)	\$ 67.45	\$ 58.09	\$ 15.10	\$ 13.28
Weighted average number of shares used in computing net loss per share, basic and diluted	431,679	622,289	545,142	691,834
Pro forma net loss per share, basic and diluted(1)		\$ 2.50		\$ 0.53
Weighted average number of shares used in computing pro forma net loss per share, basic and diluted(1)		14,461,086		17,174,802

(1) See Note 13 to our audited consolidated financial statements and Note 11 to our unaudited interim condensed consolidated financial statements for an explanation of the method used to calculate historical and pro forma basic and diluted net loss per share.

		As of March 31, 2019		
	<u>Actual</u>	Pro <u>Forma(1)</u> (in thousands)	Pro Forma as <u>Adjusted(2)(3)</u>	
Consolidated Balance Sheet Data:				
Cash and cash equivalents	\$ 61,758	\$ 61,758	\$ 127,708	
Working capital	59,753	59,753	125,703	
Total assets	67,860	67,860	133,810	
Convertible preferred stock	168,058	_	_	
Accumulated deficit	(128,141)	(128,141)	(128,141)	
Total stockholders' (deficit) equity	(105,751)	62,307	128,257	

- (1) The proforma column in the consolidated balance sheet data above gives effect to the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 16,921,931 shares of common stock as of March 31, 2019.
- (2) The proforma as adjusted column gives effect to the adjustment described in footnote (1) above and the receipt of \$66.0 million in net proceeds from the sale by us of 5,000,000 shares of common stock in this offering at an assumed initial public offering price of \$15.00 per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) Each \$1.00 increase (decrease) in the assumed initial public offering price of \$15.00 per share of common stock, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and total stockholders' (deficit) equity by approximately \$4.7 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase (decrease) the number of shares we are offering. An increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) the amount of cash and cash equivalents, working capital, total assets and total stockholders' (deficit) equity by approximately \$14.0 million, assuming the assumed initial public offering price per share, as set forth on the cover page of this prospectus, remains the same. The pro forma as adjusted information above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider and read carefully all of the risks and uncertainties described below, as well as other information included in this prospectus, including our consolidated financial statements and related notes appearing at the end of this prospectus and our "Management's Discussion and Analysis of Financial Conditions and Results of Operations," before making an investment decision. The risks described below are not the only ones facing us. The occurrence of any of the following risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition or results of operations. In such case, the trading price of our common stock could decline, and you may lose all or part of your original investment. This prospectus also contains forward-looking statements and estimates that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of a number of specific factors, including the risks and uncertainties described below.

Risks Related to Our Business

We are a clinical stage biopharmaceutical company with a history of losses. We expect to continue to incur significant losses for the foreseeable future and may never achieve or maintain profitability, which could result in a decline in the market value of our common stock.

We are a clinical stage biopharmaceutical company with a history of losses. Since our inception, we have devoted substantially all of our resources to research and development, including our drug discovery and development engine, preclinical studies, clinical trials, raising capital, building our management team and our intellectual property portfolio. Our net loss was \$9.2 million and \$36.1 million for the three months ended March 31, 2019 and for the year ended December 31, 2018, respectively. As of March 31, 2019, we had an accumulated deficit of \$128.1 million. Substantially all of our losses have resulted from expenses incurred in connection with our research and development programs and from general and administrative costs associated with our operations. To date, we have not generated any revenue. Furthermore, we do not expect to generate any revenue from product sales for the foreseeable future, and we expect to continue to incur significant operating losses for the foreseeable future due to the cost of research and development, preclinical studies, clinical trials and the regulatory approval process for our current and potential future drug candidates.

We expect our net losses to increase substantially as we advance the clinical development of our lead drug candidates, FLX475 and RPT193. However, the amount of our future losses is uncertain. Our ability to generate revenue from product sales and achieve or sustain profitability, if ever, will depend on, among other things, successfully developing drug candidates, obtaining regulatory approvals to market and commercialize drug candidates, manufacturing any approved products on commercially reasonable terms, entering into any future collaborations or other partnerships, establishing a sales and marketing organization or suitable third-party alternatives for any approved product and raising sufficient capital to finance our operations. If we, or any of our future partners, are unable to develop and commercialize one or more of our drug candidates, or if sales revenue from any drug candidate that receives regulatory approval is insufficient, we will not achieve or sustain profitability, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

FLX475 and RPT193 are in clinical and preclinical development, respectively, and may fail in development or suffer delays that materially and adversely affect their commercial viability.

We have no products on the market or that have gained regulatory approval and RPT193 has not entered clinical trials. Other than FLX475, none of our drug candidates has ever been tested in humans. None of our drug candidates has advanced into late-stage development or a pivotal clinical trial and it may be years before any such trial is initiated, if at all. Our ability to achieve and sustain profitability depends on us developing, obtaining regulatory approval for and successfully commercializing one or more drug candidates, either alone or with partners.

Before obtaining regulatory approval for any of our drug candidates, we must conduct extensive preclinical studies and clinical trials to demonstrate the safety and efficacy of our drug candidates in humans. Although we have successfully completed preclinical studies and a Phase 1 clinical trial with healthy volunteers for FLX475, and are conducting a Phase 1/2 clinical trial investigating FLX475 as a single agent and in combination with pembrolizumab in a broad range of tumors, more clinical trials are needed and there is no guarantee that the FDA will permit us to conduct additional clinical trials for FLX475 or any other potential drug candidates. Further, we cannot be certain of the timely completion or outcome of our clinical trials and cannot predict if the FDA or other regulatory authorities will accept our proposed clinical programs, or if the outcome of our preclinical studies or clinical trials will ultimately support the further development of FLX475, RPT193 or any other potential drug candidates.

FLX475 and RPT193 are in clinical and preclinical development, respectively, and we are subject to the risks of failure inherent in the development of drug candidates based on novel approaches, targets and mechanisms of action. Although FLX475 is currently in a Phase 1/2 clinical trial, there is no guarantee that FLX475 will benefit patients. Additionally, although RPT193 has shown activity in several preclinical models and we plan to initiate a clinical trial for RPT193, there is no guarantee that we will be able to proceed with its clinical development or that it will benefit patients. Even though we have designed and selected our drug candidates to achieve an intended biological effect and to avoid certain others, and even if we have demonstrated this effect in preclinical models, there can be no assurance that the effect will be observed or avoided, as the case may be, in clinical trials or that the drug candidate will offer any significant clinical benefit to humans. Results in preclinical studies do not necessarily predict the results of clinical studies. Additionally, even though our drug candidates are designed to address the same indications as existing drugs and therapies, we have not conducted head-to-head clinical trials comparing our drug candidates with such existing drugs and therapies. Accordingly, you should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by clinical and preclinical stage biopharmaceutical companies such as ours.

FLX475 is currently undergoing clinical development and testing as a single agent and in combination with pembrolizumab, which is supplied to us by Merck under our collaboration agreement with Merck. If Merck were to terminate our collaboration agreement, we may be forced to purchase pembrolizumab to continue our current and planned clinical trials or to pursue another anti-PD-1 therapy for co-administration with FLX475 in place of pembrolizumab, which may require us to restart preclinical studies or clinical trials, any of which could result in a change to our business plan and materially harm our business, financial condition, results of operations and prospects. In addition, if FLX475 is approved as a treatment in combination with pembrolizumab, then the availability of pembrolizumab for administration with FLX475 will affect our ability to commercialize FLX475. For example, if supply of pembrolizumab were constrained for any reason it could have the effect of limiting the commercial uptake of FLX475, if approved for commercial sale.

We may not have the financial resources to continue development of, or to enter into new collaborations for, FLX475 and RPT193 or any potential future drug candidates. Our position may be exacerbated if we experience any issues that delay or prevent regulatory approval of, or our ability to commercialize, a drug candidate, such as:

- negative or inconclusive results from our clinical trials or the clinical trials of others for drug candidates similar to ours, leading to a
 decision or requirement to conduct additional preclinical studies or clinical trials or abandon a program;
- product-related side effects experienced by participants in our clinical trials or by individuals using drugs or therapeutics similar to ours:
- delays in submitting INDs or comparable foreign applications, or delays or failure in obtaining the necessary approvals from regulators to commence a clinical trial, or a suspension or termination of a clinical trial once commenced;

- conditions imposed by the FDA, or other regulatory authorities regarding the scope or design of our clinical trials;
- delays in enrolling research subjects in clinical trials;
- high drop-out rates of research subjects;
- · inadequate supply or quality of drug candidate components or materials or other supplies necessary for the conduct of our clinical trials;
- greater-than-anticipated clinical trial costs;
- poor effectiveness of our drug candidates during clinical trials;
- unfavorable FDA or other regulatory agency inspection and review of a clinical trial or manufacturing site;
- failure of our third-party contractors or investigators to comply with regulatory requirements or otherwise meet their contractual obligations in a timely manner, or at all;
- delays and changes in regulatory requirements, policies and guidelines; or
- the FDA or other regulatory agencies' data interpretation.

Further, we and our potential future partners may never receive approval to market and commercialize any drug candidate. Even if we or a potential future partner obtains regulatory approval, the approval may be for targets, disease indications or patient populations that are not as broad as we intended or desired or may require labeling that includes significant use or distribution restrictions or safety warnings. We or a potential future partner may be subject to post-marketing testing requirements to maintain regulatory approval.

If RPT193 or an RPT-GCN2i or other future drug candidate is tested in humans, it may not demonstrate the safety and efficacy necessary to support further clinical development or commercial viability.

Neither RPT193 nor an RPT-GCN2i candidate has been tested in humans. We may ultimately discover that neither RPT193 nor an RPT-GCN2i candidate possesses certain properties that we currently believe are therapeutically effective or safe. For example, although RPT193 has exhibited encouraging results in preclinical models of AD and allergic asthma, it may not demonstrate the same properties in humans and may interact with human biological systems in unforeseen, ineffective or harmful ways. As a result, we may never succeed in developing a marketable product based on RPT193. If RPT193 or any of our potential future drug candidates prove to be ineffective, unsafe or commercially unviable, our entire pipeline could have little, if any, value, which could require us to change our focus and approach to small molecule discovery and development, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

We may not be successful in our efforts to use and expand our proprietary drug discovery and development engine to build a pipeline of drug candidates, and as an organization we have no history of successfully developing drugs.

A key element of our strategy is to use and expand our proprietary drug discovery and development engine to build a pipeline of potential drug candidates and advance these drug candidates through preclinical studies and clinical development for the treatment of various diseases. As an organization, we have never developed a drug candidate through to commercialization nor have we ever conducted a pivotal clinical trial. Although our research and development efforts to date have resulted in our identification and development of

FLX475, RPT193 and other potential future drug candidates, neither our proprietary drug discovery and development engine nor our organization has a track record of success. Our current drug candidates may not be safe or effective therapeutics and we may not be able to develop any successful drug candidates. Our proprietary drug discovery and development engine is evolving and may not reach a state at which building a pipeline of drug candidates is possible. Even if we are successful in building our pipeline of drug candidates, the potential drug candidates that we identify may not be suitable for clinical development or generate acceptable clinical data, including unacceptable toxicity or other characteristics that indicate that the drug candidates are unlikely to be products that will receive marketing approval from the FDA or other regulatory authorities or achieve market acceptance. Even if the drug candidates we identify are suitable for clinical development, our lack of experience as an organization at developing drugs may cause us to fail in successfully developing the drug candidate through to commercialization. If we do not successfully develop and commercialize drug candidates, we will not be able to generate product revenue in the future.

Failure to successfully validate, develop and obtain regulatory approval for companion diagnostics for our drug candidates could harm our drug development strategy and operational results.

As one of the elements of our clinical development approach, we may seek to screen and identify subsets of patients who are more likely to benefit from our drug candidates. To achieve this, we may seek to develop and commercialize companion diagnostics by us or by third-party collaborators. Companion diagnostics are sometimes developed in conjunction with clinical programs for an associated product. The approval of a companion diagnostic as part of the product label would limit the use of the drug candidate to those patients who are more likely to benefit from our drug candidate.

Companion diagnostics are subject to regulation by the FDA and other regulatory authorities as medical devices and require separate clearance or approval prior to their commercialization. To date, the FDA has required premarket approval of all companion diagnostics for oncology therapies. We may encounter difficulties in developing and obtaining approval for these companion diagnostics. Any delay or failure by us or third-party collaborators to develop or obtain regulatory approval of a companion diagnostic could delay or prevent approval of our related drug candidates. The time and cost associated with developing a companion diagnostic may not prove to have been necessary in order to successfully market the product.

The market may not be receptive to our current or potential future drug candidates, and we may not generate any revenue from the sale or licensing of our drug candidates.

Even if regulatory approval is obtained for a drug candidate, including FLX475 or RPT193, we may not generate or sustain revenue from sales of such products. Market acceptance of our current and potential future drug candidates will depend on, among other factors:

- the timing of our receipt of any marketing and commercialization approvals;
- the terms of any approvals and the countries in which approvals are obtained;
- the safety and efficacy of our drug candidates;
- the prevalence and severity of any adverse side effects associated with our drug candidates;
- limitations or warnings contained in any labeling approved by the FDA or other regulatory authority;
- relative convenience and ease of administration of our drug candidates;
- the extent to which physicians recommend our products to their patients;

- the availability of coverage and adequate government and third-party payor reimbursement;
- the pricing of our products, particularly as compared to alternative treatments; and
- the availability of alternative effective treatments for the disease indications our drug candidates are intended to treat and the relative risks, benefits and costs of those treatments.

If any drug candidate we commercialize fails to achieve market acceptance, it could have a material and adverse effect on our business, financial condition, results of operations and prospects.

We may not be successful in our efforts to expand indications for approved drug candidates

Part of our drug development strategy is to clinically test and seek regulatory approval for our drug candidates in indications in which we believe there is the most evidence that we will be able to quickly generate PoC data. We then intend to expand clinical testing and seek regulatory approvals in other indications within oncology and inflammatory diseases. Conducting clinical trials for additional indications for our drug candidates requires substantial technical, financial and human resources and is prone to the risks of failure inherent in drug development. We cannot provide you any assurance that we will be successful in our effort to obtain regulatory approval for our drug candidates for additional indications even if we obtain approval for an initial indication.

If we or others later identify undesirable side effects caused by FLX475 or RPT193, our ability to market and derive revenue from the drug candidate could be compromised.

Undesirable side effects caused by FLX475, RPT193 or any other potential future drug candidate could cause regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other regulatory authorities. While we have not discovered any adverse side effects of FLX475 in healthy subjects that have limited our ability to test FLX475 in cancer patients, and we have not initiated clinical trials for RPT193 or an RPT-GCN2i candidate, it is possible that there will be undesirable side effects associated with their use. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of these side effects. In such an event, our trials could be suspended or terminated, and the FDA or other regulatory authorities could order us to cease further development of or deny approval of a drug candidate for any or all targeted indications. Such side effects could also affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may materially and adversely affect our business and financial condition and impair our ability to generate revenues.

Further, clinical trials by their nature utilize a sample of the potential patient population. With a limited number of patients and limited duration of exposure, rare and severe side effects of a drug candidate may only be uncovered when a significantly larger number of patients are exposed to the drug candidate or when patients are exposed for a longer period of time.

If any of our current or potential future drug candidates receive regulatory approval and we or others identify undesirable side effects caused by one of these products, any of the following adverse events could occur, which could result in the loss of significant revenue to us and materially and adversely affect our results of operations and business:

- regulatory authorities may withdraw their approval of the product or seize the product;
- we may be required to recall the product or change the way the 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;

- we may be subject to fines, injunctions or the imposition of civil or criminal penalties;
- regulatory authorities may require the addition of labeling statements, such as a "black box" warning or a contraindication;
- · we may be required to 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.

Even if we consummate this offering, we will need substantial additional funds to advance development of drug candidates and our drug discovery and development engine, and we cannot guarantee that we will have sufficient funds available in the future to develop and commercialize our current or potential future drug candidates.

The development of biopharmaceutical drug candidates is capital-intensive. We will need substantial additional funds to expand our development, regulatory, manufacturing, marketing and sales capabilities. We have used substantial funds to develop our drug discovery and development engine, FLX475, RPT193 and other drug candidates, and we will require significant funds to continue to develop our drug discovery and development engine and conduct further research and development, including preclinical studies and clinical trials. In addition, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company.

As of March 31, 2019, we had \$61.8 million in cash and cash equivalents. Based on our current operating plan, we believe that our cash and cash equivalents as of March 31, 2019, together with the estimated net proceeds from this offering, will be sufficient to fund our operations through the first quarter of 2021. Our future capital requirements and the period for which we expect our existing resources to support our operations may vary significantly from what we expect. Our monthly spending levels vary based on new and ongoing research and development and other corporate activities. Because of the numerous risks and uncertainties associated with the development and commercialization of our current and potential future drug candidates and the extent to which we may enter into collaborations with third parties to participate in their development and commercialization, we are unable to estimate the amounts of increased capital outlays and operating expenditures associated with our current and anticipated preclinical studies, clinical trials and any approved marketing and commercialization activities. The timing and amount of our operating expenditures will depend largely on:

- the timing and progress of preclinical and clinical development activities;
- the timing and progress of our advancement of our drug discovery and development engine;
- the price and pricing structure that we are able to obtain from our third-party contract manufacturers to manufacture our preclinical study and clinical trial materials and supplies;
- the number and scope of preclinical and clinical programs we decide to pursue;
- our ability to maintain our current licenses, collaboration and research and development programs, including the continued agreement of Merck to supply pembrolizumab to us for use in our clinical trials;
- our ability to establish new collaborations;

- the progress of the development efforts of parties with whom we may in the future enter into collaboration and research and development agreements;
- the costs involved in obtaining, maintaining, enforcing and defending patents and other intellectual property rights;
- the cost and timing of regulatory approvals; and
- our efforts to enhance operational systems, secure sufficient laboratory space and hire additional personnel, including personnel to support development of our drug candidates and satisfy our obligations as a public company.

To date, we have primarily financed our operations through the sale of equity securities. We may seek to raise any necessary additional capital through a combination of public or private equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing and distribution arrangements. We cannot assure you that we will be successful in acquiring additional funding at levels sufficient to fund our operations or on terms favorable to us. 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 preclinical studies, clinical trials, research and development programs or commercialization efforts. To the extent that we raise additional capital through collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish valuable rights to our current and potential future drug candidates, future revenue streams or research programs or to grant licenses on terms that may not be favorable to us. If we do raise additional capital through public or private equity or convertible debt offerings, the ownership interest of our existing stockholders will be diluted and the terms of these securities may include liquidation preferences or other rights that adversely affect our and 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.

We do not expect to realize revenue from product sales in the foreseeable future, if at all, and unless and until our current and potential future drug candidates are clinically tested, approved for commercialization and successfully marketed.

We may expend our limited resources to pursue a particular drug candidate and fail to capitalize on drug candidates that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we intend to prioritize our efforts on specific research and development programs, including clinical development of FLX475, RPT193 and an RPT-GCN2i or other future drug candidates. As a result, we may forgo or delay pursuit of other opportunities, including with potential future drug candidates that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and drug candidates for specific indications may not yield any commercially viable drug candidates. If we do not accurately evaluate the commercial potential or target market for a particular drug candidate, we may relinquish valuable rights to that drug candidate through partnership, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such drug candidate.

We may not be able to enter into collaborations or strategic transactions on acceptable terms, if at all, which could adversely affect our ability to develop and commercialize current and potential future drug candidates, impact our cash position and increase our expense.

From time to time, we may consider strategic transactions, such as collaborations, acquisitions of companies, asset purchases, joint ventures and out- or in-licensing of drug candidates or technologies. For

example, we will evaluate and, if strategically attractive, seek to enter into collaborations, including with biotechnology or pharmaceutical companies, hospitals or other third parties. The competition for partners is intense, and the negotiation process may be time-consuming and complex. If we are not able to enter into collaborations or other strategic transactions, or continue our existing collaboration, we may not have access to required liquidity or expertise to further develop our potential future drug candidates or our drug discovery and development engine. Any such collaboration, or other strategic transaction, may require us to incur non-recurring or other charges, increase our near- and long-term expenditures and pose significant integration or implementation challenges or disrupt our management or business. We may acquire additional technologies and assets, form strategic alliances or create joint ventures with third parties that we believe will complement or augment our existing business, but we may not be able to realize the benefit of acquiring such assets. Conversely, any new collaboration that we do enter into may be on terms that are not optimal for us. These transactions would entail numerous operational and financial risks, including:

- exposure to unknown liabilities;
- disruption of our business and diversion of our management's time and attention in order to manage a collaboration or develop acquired products, drug candidates or technologies;
- incurrence of substantial debt or dilutive issuances of equity securities to pay transaction consideration or costs;
- higher-than-expected collaboration, acquisition or integration costs, write-downs of assets or goodwill or impairment charges, increased amortization expenses;
- difficulty and cost in facilitating the collaboration or combining the operations and personnel of any acquired business;
- impairment of relationships with key suppliers, manufacturers or customers of any acquired business due to changes in management and ownership; and
- the inability to retain key employees of any acquired business.

Accordingly, although there can be no assurance that we will undertake or successfully complete any collaborations or other strategic transactions of the nature described above, any transactions that we do complete may be subject to the foregoing or other risks and our business could be materially harmed by such transactions. Conversely, any failure to enter any collaboration or other strategic transaction that would be beneficial to us could delay the development and potential commercialization of our drug candidates and have a negative impact on the competitiveness of any drug candidate that reaches market.

In addition, to the extent that any of our current or future partners were to terminate a collaboration agreement, we may be forced to seek additional partnerships, which may be less favorable to us, or independently develop our current and future drug candidates, including funding preclinical studies or clinical trials, assuming marketing and distribution costs and obtaining, maintaining, enforcing and defending intellectual property rights, or, in certain instances, abandon drug candidates altogether, any of which could result in a change to our business plan and materially harm our business, financial condition, results of operations and prospects.

If third parties on which we rely to conduct certain preclinical studies and clinical trials do not perform as contractually required, fail to satisfy regulatory or legal requirements or miss expected deadlines, our development program could be delayed with material and adverse impacts on our business and financial condition.

We rely on third-party clinical investigators, contract research organizations ("CROs"), clinical data management organizations and consultants to design, conduct, supervise and monitor certain preclinical studies

and any clinical trials. Because we intend to rely on these third parties and will not have the ability to conduct certain preclinical studies or clinical trials independently, we will have less control over the timing, quality and other aspects of such preclinical studies and clinical trials than if we would have had we conducted them on our own. These investigators, CROs and consultants will not be our employees and we will have limited control over the amount of time and resources that they dedicate to our programs. These third parties may have contractual relationships with other entities, some of which may be our competitors, which may draw time and resources from our programs. The third parties with which we may contract might not be diligent, careful or timely in conducting our preclinical studies or clinical trials, resulting in the preclinical studies or clinical trials being delayed or unsuccessful.

If we cannot contract with acceptable third parties on commercially reasonable terms, or at all, or if these third parties do not carry out their contractual duties, satisfy legal and regulatory requirements for the conduct of preclinical studies or clinical trials or meet expected deadlines, our clinical development programs could be delayed and otherwise adversely affected. In all events, we will be responsible for ensuring that each of our preclinical studies and clinical trials are conducted in accordance with the general investigational plan and protocols for the trial. The FDA may require preclinical studies to be conducted in accordance with good laboratory practices and clinical trials to be conducted in accordance with good clinical practices, including for designing, conducting, recording and reporting the results of preclinical studies and clinical trials to ensure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of clinical trial participants are protected. Our reliance on third parties that we do not control will not relieve us of these responsibilities and requirements. Any adverse development or delay in our clinical trials could have a material and adverse impact on our commercial prospects and may impair our ability to generate revenue.

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

We may not be able to initiate or continue clinical trials for our current or potential future drug candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or other regulatory authorities. In particular, we are conducting a Phase 1/2 clinical trial investigating FLX475 as a single agent and in combination with pembrolizumab in a broad range of tumors. We cannot predict how difficult it will be to enroll patients for trials in these indications. 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 severity of the disease under investigation;
- the patient eligibility criteria defined in the clinical trial protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity and availability of clinical trial sites for prospective patients;
- the patient referral practices of physicians;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the drug candidate being studied in relation to other available therapies, including any new drugs that may be approved for the indications we are investigating;
- · our ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will drop out of the trials before completion.

In addition, our future clinical trials will compete with other clinical trials for drug candidates that are in the same therapeutic areas as our drug candidates, and this competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. 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 clinical trial sites. Additionally, because some of our clinical trials will be conducted in patients with advanced solid tumors, the patients are typically in the late stages of the disease and may experience disease progression or adverse events independent from our drug candidates, making them unevaluable for purposes of the trial and requiring additional enrollment. Delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our drug candidates.

We may not be able to conduct, or contract others to conduct, animal testing in the future, which could harm our research and development activities.

Certain laws and regulations relating to drug development require us to test our drug candidates on animals before initiating clinical trials involving humans. Animal testing activities have been the subject of controversy and adverse publicity. Animal rights groups and other organizations and individuals have attempted to stop animal testing activities by pressing for legislation and regulation in these areas and by disrupting these activities through protests and other means. To the extent the activities of these groups are successful, our research and development activities may be interrupted or delayed.

Because we may rely on third parties for manufacturing and supply of our drug candidates, some of which are or may be sole source vendors, for preclinical and clinical development materials and commercial supplies, our supply may become limited or interrupted or may not be of satisfactory quantity or quality.

We currently rely on third-party contract manufacturers for our current and future clinical trial product materials and supplies. We do not produce any meaningful quantity of our drug candidates for clinical development, and we do not currently own manufacturing facilities for producing such supplies. Furthermore, some of our manufacturers represent our sole source of supplies of current and future clinical development materials, including our source for the manufacture of FLX475 and RPT193. We cannot assure you that our preclinical or current or future clinical development product supplies and commercial supplies will not be limited or interrupted, especially with respect to our sole source third-party manufacturing and supply partners, or will be of satisfactory quality or continue to be available at acceptable prices. In particular, any replacement of our manufacturers could require significant effort and expertise because there may be a limited number of qualified replacements. For our current and future sole source third-party manufacturing and supply partners, we may be unable to negotiate binding agreements with them or find replacement manufacturers to support our preclinical and current and future clinical activities at commercially reasonable terms in the event that their services to us becomes interrupted for any reason. We do not always have arrangements in place for a redundant or second-source supply for our sole source vendors in the event they cease to provide their products or services to us or do not timely provide sufficient quantities to us. Establishing additional or replacement sole source vendors, if required, may not be accomplished quickly. Any delays resulting from manufacturing or supply interruptions associated with our reliance on third-party manufacturing and supply partners, including those that are sole source, could impede, delay, limit or prevent our drug development efforts, which could harm our business, result of operations, financial condition and prospects.

The manufacturing process for a drug candidate is subject to FDA and other regulatory authority review. Suppliers and manufacturers must meet applicable manufacturing requirements and undergo rigorous facility and process validation tests required by regulatory authorities in order to comply with regulatory standards, such as current Good Manufacturing Practices ("cGMP"). If any of our manufacturers fails to comply with such requirements or to perform its obligations to us in relation to quality, timing or otherwise, or if our supply of

components or other materials becomes limited or interrupted for other reasons, we may be forced to manufacture the materials ourselves, for which we currently do not have the capabilities or resources, or enter into an agreement with another third party, which we may not be able to do on reasonable terms, or at all. In some cases, the technical skills or technology required to manufacture our current and future drug candidates may be unique or proprietary to the original manufacturer and we may have difficulty transferring such skills or technology to another third party and a feasible alternative may not exist. These factors would increase our reliance on such manufacturer or require us to obtain a license from such manufacturer in order to have another third-party manufacture our drug candidates. If we are required to change manufacturers for any reason, we will be required to verify that the new manufacturer maintains facilities and procedures that comply with quality standards and with all applicable regulations and guidelines. The delays associated with the verification of a new manufacturer could negatively affect our ability to develop drug candidates in a timely manner or within budget.

We also expect to rely on third-party manufacturers if we receive regulatory approval for any drug candidate. We have existing, and may enter into future, manufacturing arrangements with third parties. We will depend on these third parties to perform their obligations in a timely manner consistent with contractual and regulatory requirements, including those related to quality control and assurance. If we are unable to obtain or maintain third-party manufacturing for any drug candidate, or to do so on commercially reasonable terms, we may not be able to develop and commercialize our drug candidates successfully. Our or a third party's failure to execute on our manufacturing requirements and comply with cGMP could adversely affect our business in a number of ways, including:

- an inability to initiate or continue clinical trials of drug candidates under development;
- delay in submitting regulatory applications, or receiving regulatory approvals, for drug candidates;
- loss of the cooperation of a potential future partner;
- subjecting third-party manufacturing facilities or our potential future manufacturing facilities to additional inspections by regulatory authorities;
- requirements to cease distribution or to recall batches of drug candidates; and
- in the event of approval to market and commercialize a drug candidate, an inability to meet commercial demands for our products.

Our third-party manufacturers may be unable to successfully scale manufacturing of FLX475, RPT193 or potential future drug candidates in sufficient quality and quantity, which would delay or prevent us from developing drug candidates and commercializing approved products, if any.

In order to conduct further clinical trials for FLX475 and RPT193 as well as any potential future drug candidates, we will need to manufacture large quantities of these drug candidates. We may continue to use third parties for our manufacturing needs. Our manufacturing partners may be unable to successfully increase the manufacturing capacity for any current or potential future drug candidate in a timely or cost-effective manner, or at all. In addition, quality issues may arise during scale-up activities. If our manufacturing partners are unable to successfully scale the manufacture of any current or potential future drug candidate in sufficient quality and quantity, the development, testing and clinical trials of that drug candidate may be delayed or infeasible, and regulatory approval or commercial launch of any potential resulting product may be delayed or not obtained, which could significantly harm our business.

If the market opportunities for our current and potential future drug candidates, including FLX475 and RPT193, are smaller than we believe they are, our ability to generate product revenues may be adversely affected and our business may suffer.

Our understanding of the number of people who suffer from certain types of cancers and allergic inflammatory diseases that FLX475 and RPT193, respectively, may have the potential to treat is based on estimates. These estimates may prove to be incorrect, and new studies may demonstrate or suggest a lower estimated incidence or prevalence of these diseases. The number of patients in the United States or elsewhere may turn out to be lower than expected, may not be otherwise amenable to treatment with our current or potential future drug candidates or patients may become increasingly difficult to identify and access, all of which would adversely affect our business prospects and financial condition. In particular, the treatable population for our candidates may further be reduced if our estimates of addressable populations are erroneous or sub-populations of patients do not derive benefit from FLX475 or RPT193.

Further, there are several factors that could contribute to making the actual number of patients who receive our current or potential future drug candidates less than the potentially addressable market, including the lack of widespread limited reimbursement for new therapies in many markets.

We face intense competition from entities that have developed or may develop drug candidates for the treatment of the diseases that we are currently targeting or may target in the future. If these companies develop technologies or drug candidates more rapidly than we do, or if their technologies or drug candidates are more effective, our ability to develop and successfully commercialize drug candidates may be adversely affected.

The development and commercialization of drugs and therapeutic biologics is highly competitive. We compete with a variety of large pharmaceutical companies, multinational biopharmaceutical companies, other biopharmaceutical companies and specialized biotechnology companies, as well as technology being developed at universities and other research institutions. Our competitors are often larger and better funded than we are. Our competitors have developed, are developing or will develop drug candidates and processes competitive with ours. Competitive therapeutic treatments include those that have already been approved and accepted by the medical community and any new treatments that are currently in development or that enter the market. We believe that a significant number of products are currently under development, and may become commercially available in the future, for the treatment of conditions for which we are developing or may try to develop drug candidates. There is intense and rapidly evolving competition in the biotechnology, biopharmaceutical, immuno-oncology and inflammation fields.

We are aware of a number of companies that are developing biologics and small molecule drugs for the treatment of cancer and inflammatory diseases. Many of these companies are well-capitalized and, in contrast to us, have significant clinical experience, and may include our future partners. In addition, these companies compete with us in recruiting scientific and managerial talent. Our success will partially depend on our ability to obtain, maintain, enforce and defend patents and other intellectual property rights with respect to small molecule drugs or biologics that are safer and more effective than competing products. Our commercial opportunity and success will be reduced or eliminated if competing products that are safer, more effective, or less expensive than the drugs we develop are or become available.

We expect to compete with small molecule, biologics and other therapeutic platforms and development companies, including, but not limited to, companies such as ChemoCentryx, Tusk/Roche and Agenus/Gilead for oncology, and Dermira and AnaptysBio for inflammatory diseases. In addition, we expect to compete with large, multinational pharmaceutical companies that discover, develop and commercialize small molecule drugs and other therapeutics for use in treating cancer and inflammatory diseases such as AbbVie, Amgen, AstraZeneca plc, Bristol-Myers Squibb, GlaxoSmithKline, Incyte, Kyowa Hakko Kirin, Merck, Novartis, Pfizer, Roche/Genentech and Sanofi/Regeneron. If FLX475, RPT193 or an RPT-GCN2i or other future drug candidate is eventually approved, it will compete with a range of treatments that are either in development or currently marketed.

Many of our competitors have significantly greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we do. If we successfully obtain approval for any drug candidate, we will face competition based on many different factors, including the safety and effectiveness of our products, the ease with which our products can be administered, the timing and scope of regulatory approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Competing products could present superior treatment alternatives, including by being more effective, safer, less expensive or marketed and sold more effectively than any products we may develop. Competitive products may make any product we develop obsolete or noncompetitive before we recover the expense of developing and commercializing such product. Such competitors could also recruit our employees, which could negatively impact our level of expertise and our ability to execute our business plan.

Any inability to attract and retain qualified key management, technical personnel and employees would impair our ability to implement our business plan.

Our success largely depends on the continued service of key management, advisors and other specialized personnel, including Brian Wong, M.D., Ph.D., our President and Chief Executive Officer, William Ho, M.D., Ph.D., our Chief Medical Officer, Dirk Brockstedt, Ph.D., our Chief Scientific Officer, David Wustrow, Ph.D., our Senior Vice President of Drug Discovery and Preclinical Development, Paul Kassner, Ph.D., our Vice President, Quantitative and Computational Biology, Karen C. Lam, our Vice President, Finance and Corporate Controller, and Erin Campany, our Vice President, Human Resources, as well as our ability to attract and retain other highly qualified personnel. We have a written employment agreement with each of Dr. Wong, Dr. Ho, Dr. Brockstedt, Dr. Wustrow, Dr. Kassner, Ms. Lam and Ms. Campany. The loss of one or more members of our executive team, management team or other key employees or advisors could delay our research and development programs and have a material and adverse effect on our business, financial condition, results of operations and prospects.

The relationships that our key managers have cultivated within our industry make us particularly dependent upon their continued employment with us. We are dependent on the continued service of our technical personnel because of the highly technical nature of our drug candidates and technologies and the specialized nature of the regulatory approval process. Because our management team and key employees are not obligated to provide us with continued service, they could terminate their employment with us at any time without penalty.

Our future success will also depend in large part on our ability to attract and retain other highly qualified scientific, technical and management personnel, as well as personnel with expertise in clinical testing, manufacturing, governmental regulation and commercialization. We face significant competition for personnel from other companies, universities, public and private research institutions, government entities and other organizations.

As of June 30, 2019, we had 62 full-time employees. Our focus on the development of FLX475, RPT193 and an RPT-GCN2i and other potential future drug candidates will require adequate staffing. We may need to hire and retain new employees to execute our future clinical development and manufacturing plans. We cannot provide assurance that we will be able to hire or retain adequate staffing levels to develop our current and potential future drug candidates or to run our operations or to accomplish all of our objectives.

We may experience difficulties in managing our growth and expanding our operations.

We have limited experience in product development. As our current and potential future drug candidates enter and advance through preclinical studies and any clinical trials, we will need to expand our development, regulatory and manufacturing capabilities or contract with other organizations to provide these capabilities for us.

We may also experience difficulties in the discovery and development of potential future drug candidates using our drug discovery and development engine if we are unable to meet demand as we grow our

operations. In the future, we also expect to have to manage additional relationships with collaborators, suppliers and other organizations. Our ability to manage our operations and future growth will require us to continue to improve our operational, financial and management controls, reporting systems and procedures and secure adequate facilities for our operational needs. We may not be able to implement improvements to our management information and control systems in an efficient or timely manner and may discover deficiencies in existing systems and controls.

If any of our drug candidates is approved for marketing and commercialization in the future and we are unable to develop sales, marketing and distribution capabilities on our own or enter into agreements with third parties to perform these functions on acceptable terms, we will be unable to successfully commercialize any such future products.

We currently have no sales, marketing or distribution capabilities or experience. We will need to develop internal sales, marketing and distribution capabilities to commercialize each current and potential future drug candidate that gains FDA approval, which would be expensive and time-consuming, or enter into partnerships with third parties to perform these services. If we decide to market any approved products directly, we will need to commit significant financial and managerial resources to develop a marketing and sales force with technical expertise and supporting distribution, administration and compliance capabilities. If we rely on third parties with such capabilities to market any approved products or decide to co-promote products with partners, we will need to establish and maintain marketing and distribution arrangements with third parties, and there can be no assurance that we will be able to enter into such arrangements on acceptable terms or at all. In entering into third-party marketing or distribution arrangements, any revenue we receive will depend upon the efforts of the third parties and we cannot assure you that such third parties will establish adequate sales and distribution capabilities or be successful in gaining market acceptance for any approved product. If we are not successful in commercializing any product approved in the future, either on our own or through third parties, our business and results of operations could be materially and adversely affected.

Our present and potential future international operations may expose us to business, political, operational, and financial risks associated with doing business outside of the United States.

Our business is subject to risks associated with conducting business internationally. Some of our suppliers and clinical trial centers are located outside of the United States. Furthermore, if we or any future collaborator succeeds in developing any products, we anticipate marketing them in the European Union and other jurisdictions in addition to the United States. If approved, we or our collaborator may hire sales representatives and conduct physician and patient association outreach activities outside of the United States. Doing business internationally involves a number of risks, including but not limited to:

- multiple, conflicting and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, employment laws, regulatory requirements, and other governmental approvals, permits and licenses;
- failure by us to obtain and maintain regulatory approvals for the use of our products in various countries;
- rejection or qualification of foreign clinical trial data by the competent authorities of other countries;
- additional potentially relevant third-party patent and other intellectual property rights that may be necessary to develop and commercialize our products and drug candidates;
- · complexities and difficulties in obtaining, maintaining, enforcing and defending our patent and other intellectual property rights;

- difficulties in staffing and managing foreign operations;
- · complexities associated with managing multiple payor reimbursement regimes, government payors or patient self-pay systems;
- limits in our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises
 on demand and payment for our products and exposure to foreign currency exchange rate fluctuations;
- natural disasters, political and economic instability, including wars, terrorism and political unrest, outbreak of disease, boycotts, curtailment of trade and other business restrictions, implementation of tariffs;
- · certain expenses including, among others, expenses for travel, translation and insurance; and
- regulatory and compliance risks that relate to anti-corruption compliance and record-keeping that may fall within the purview of the U.S. Foreign Corrupt Practices Act, its accounting provisions or its anti-bribery provisions or provisions of anti-corruption or anti-bribery laws in other countries.

Any of these factors could harm our ongoing international clinical operations and supply chain, as well as any future international expansion and operations and, consequently, our business, financial condition, prospects and results of operations.

Our future growth may depend, in part, on our ability to operate in foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties.

Our future growth may depend, in part, on our ability to develop and commercialize drug candidates in foreign markets for which we may rely on partnering with third parties. We will not be permitted to market or promote any drug candidate before we receive regulatory approval from the applicable regulatory authority in a foreign market, and we may never receive such regulatory approval for any drug candidate. To obtain separate regulatory approval in foreign countries, we generally must comply with numerous and varying regulatory requirements of such countries regarding safety and efficacy and governing, among other things, clinical trials and commercial sales, pricing and distribution of a drug candidate, and we cannot predict success in these jurisdictions. If we obtain approval of any of our current or potential future drug candidates and ultimately commercialize any such drug candidate in foreign markets, we would be subject to risks and uncertainties, including the burden of complying with complex and changing foreign regulatory, tax, accounting and legal requirements and the reduced protection of intellectual property rights in some foreign countries.

Price controls imposed in foreign markets may adversely affect our future profitability.

In some countries, particularly member states of the European Union, the pricing of prescription drugs is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after receipt of marketing approval for a product. In addition, there can be considerable pressure exerted by governments and other stakeholders on prices and reimbursement levels, including as part of cost-containment measures. Political, economic and regulatory developments, in the United States or internationally, may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various European Union member states and parallel distribution, or arbitrage between low-priced and high-priced member states, can further reduce prices. In some countries, we or future partners may be required to conduct clinical trials or other studies that compare the cost-effectiveness of a drug candidate to other available therapies in order to obtain or maintain reimbursement or

pricing approval. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If reimbursement of any current or potential future drug candidate that is approved for marketing in the future is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, our business and results of operations or prospects could be materially and adversely affected and our ability to commercialize such drug candidate could be materially impaired.

Our business entails a significant risk of product liability, and our inability to obtain sufficient insurance coverage could have a material and adverse effect on our business, financial condition, results of operations and prospects.

As we conduct clinical trials of FLX475 and preclinical studies of RPT193, we will be exposed to significant product liability risks inherent in the development, testing, manufacturing and marketing of cancer and inflammatory disease treatments. Product liability claims could delay or prevent completion of our development programs. If we succeed in marketing products, such claims could result in an FDA investigation of the safety and effectiveness of our products, our manufacturing processes and facilities or our marketing programs and potentially a recall of our products or more serious enforcement action, limitations on the approved indications for which they may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in decreased demand for our products, injury to our reputation, costs to defend the related litigation, a diversion of management's time and our resources, substantial monetary awards to trial participants or patients and a decline in our stock price. Any insurance we have or may obtain may not provide sufficient coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, our partners or we may be unable to obtain sufficient insurance at a reasonable cost to protect us against losses caused by product liability claims that could have a material and adverse effect on our business, financial condition, results of operations and prospects.

Our employees, principal investigators, consultants and commercial partners may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of fraud or other misconduct by our employees, principal investigators, consultants and commercial partners. Misconduct by employees could include intentional failures to comply with FDA regulations, provide accurate information to the FDA, comply with manufacturing standards we may establish, comply with federal and state healthcare fraud and abuse laws and regulations, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. 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 material and adverse effect on our business and financial condition, including the imposition of significant criminal, civil, and administrative fines or other sanctions, such as monetary penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government-funded healthcare programs, such as Medicare and Medicaid, integrity obligations, reputational harm and the curtailment or restructuring of our operations.

Failure to comply with health and data protection laws and regulations could lead to government enforcement actions (which could include civil or criminal penalties), private litigation or adverse publicity and could negatively affect our operating results and business.

We and our current and any of our future collaborators may be subject to federal, state and foreign data protection laws and regulations (i.e., laws and regulations that address privacy and data security). In the United States, numerous federal and state laws and regulations, including federal health information privacy laws (e.g., the Health Insurance Portability and Accountability Act ("HIPAA"), as amended by the Health Information Technology for Economic and Clinical Health Act ("HITECH")), state data breach notification laws, state health information privacy laws and federal and state consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), that govern the collection, use, disclosure and protection of health-related and other personal information could apply to our operations or the operations of our collaborators. In addition, we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under HIPAA, as amended by HITECH, or other privacy and data security laws. Depending on the facts and circumstances, we could be subject to criminal penalties if we knowingly obtain, use, or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

International data protection laws, including Regulation 2016/679, known as the General Data Protection Regulation ("GDPR") may also apply to health-related and other personal information obtained outside of the United States. The GDPR went into effect on May 25, 2018. The GDPR introduced new data protection requirements in the European Union, as well as potential fines for noncompliant companies of up to the greater of €20 million or 4% of annual global revenue. The regulation imposes numerous new requirements for the collection, use, storage and disclosure of personal information, including more stringent requirements relating to consent and the information that must be shared with data subjects about how their personal information is used, the obligation to notify regulators and affected individuals of personal data breaches, extensive new internal privacy governance obligations and obligations to honor expanded rights of individuals in relation to their personal information (e.g., the right to access, correct and delete their data). In addition, the GDPR includes restrictions on cross-border data transfers. The GDPR increased our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Further, the United Kingdom's vote in favor of exiting the EU, often referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, it is unclear how data transfers to and from the United Kingdom will be regulated.

In addition, California recently enacted the California Consumer Privacy Act ("CCPA"), which creates new individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling personal data of consumers or households. The CCPA will require covered companies to provide new disclosure to consumers about such companies' data collection, use and sharing practices, provide such consumers new ways to opt-out of certain sales or transfers of personal information, and provide consumers with additional causes of action. The CCPA goes into effect on January 1, 2020, and the California Attorney General may bring enforcement actions for violations beginning July 1, 2020. The CCPA was amended on September 23, 2018, and it remains unclear what, if any, further modifications will be made to this legislation or how it will be interpreted. As currently written, the CCPA may impact our business activities and exemplifies the vulnerability of our business to the evolving regulatory environment related to personal data and protected health information.

Compliance with U.S. and international data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Failure to comply with U.S. and international data protection laws and regulations could result in government enforcement actions (which could include civil or criminal penalties), private litigation or adverse publicity and could negatively affect our operating results and business.

Moreover, clinical trial subjects about whom we or any of our potential collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time consuming to defend and could result in adverse publicity that could harm our business.

If we, our CROs or our IT vendors experience security or data privacy breaches or other unauthorized or improper access to, use of, or destruction of personal data, we may face costs, significant liabilities, harm to our brand and business disruption.

In connection with our drug discovery and development engine and efforts, we or our CROs may collect and use a variety of personal data, such as name, mailing address, email addresses, phone number and clinical trial information. Although we have extensive measures in place to prevent the sharing and loss of patient data in our sample collection process associated with our drug discovery and development engine, any failure to prevent or mitigate security breaches or improper access to, use of, or disclosure of our clinical data or patients' personal data could result in significant liability under state (e.g., state breach notification laws), federal (e.g., HIPAA, as amended by HITECH), and international law (e.g., the GDPR). Any failure to prevent or mitigate security breaches or improper access to, use of, or disclosure of our clinical data or patients' personal data may cause a material adverse impact to our reputation, affect our ability to conduct new studies and potentially disrupt our business. We may also rely on third-party IT vendors to host or otherwise process some of our data and that of users, and any failure by such IT vendor to prevent or mitigate security breaches or improper access to or disclosure of such information could have similarly adverse consequences for us. If we are unable to prevent or mitigate the impact of such security or data privacy breaches, we could be exposed to litigation and governmental investigations, which could lead to a potential disruption to our business.

We depend on sophisticated information technology systems to operate our business and a cyber-attack or other breach of these systems could have a material adverse effect on our business.

We rely on information technology systems that we or our CROs or other vendors, contractors or consultants operate to process, transmit and store electronic information in our or their day-to-day operations. The size and complexity of such information technology systems makes them vulnerable to a cyber-attack, malicious intrusion, breakdown, destruction, loss of data privacy or other significant disruption. A successful attack could result in the theft or destruction of intellectual property, data, or other misappropriation of assets, or otherwise compromise our confidential or proprietary information and disrupt our operations. Cyber-attacks are becoming more sophisticated and frequent. We have invested in our systems and the protection and recoverability of our data to reduce the risk of an intrusion or interruption, and we monitor and test our systems on an ongoing basis for any current or potential threats. There can be no assurance that these measures and efforts will prevent future interruptions or breakdowns. If we or our CROs or other vendors, contractors or consultants fail to maintain or protect our information technology systems and data integrity effectively or fail to anticipate, plan for or manage significant disruptions to these systems, we or they could have difficulty preventing, detecting and controlling such cyber-attacks and any such attacks could result in losses described above as well as disputes with physicians, patients and our partners, regulatory sanctions or penalties, increases in operating expenses, expenses or lost revenues or other adverse consequences, any of which could have a material adverse effect on our business, results of operations, financial condition, prospects and cash flows.

Our information technology and other internal infrastructure systems, including corporate firewalls, servers, leased lines and connection to the internet, face the risk of systemic failure that could disrupt our operations. A significant disruption in the availability of our information technology and other internal infrastructure systems could cause interruptions and delays in our research and development work.

If we do not comply with laws regulating the protection of the environment and health and human safety, our business could be adversely affected.

Our research, development and manufacturing involves the use of hazardous materials and various chemicals. We maintain quantities of various flammable and toxic chemicals in our facilities that are required for our research, development and manufacturing activities. We are subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of these hazardous materials. We believe our procedures for storing, handling and disposing of these materials in our facilities comply with the relevant guidelines of the state of California and the Occupational Safety and Health Administration of the U.S. Department of Labor. Although we believe that our safety procedures for handling and disposing of these materials comply with the standards mandated by applicable regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. If an accident occurs, we could be held liable for resulting damages, which could be substantial. We are also subject to numerous environmental, health and workplace safety laws and regulations, including those governing laboratory procedures, exposure to blood-borne pathogens and the handling of animals and biohazardous materials. 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 these materials, this insurance may not provide adequate coverage against potential liabilities. Although we have some environmental liability insurance covering certain of our facilities, we may not maintain adequate insurance for all environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological or hazardous materials. Additional federal, state and local laws and regulations affecting our operations may be adopted in the future. We may incur substantial costs to comply with, and substantial fines or penalties if we violate, any of these laws or regulation

Our current operations are concentrated in one location, and we or the third parties upon whom we depend may be adversely affected by natural or other disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our current operations are concentrated in the San Francisco Bay Area. Any unplanned event, such as earthquake, flood, fire, explosion, extreme weather, medical epidemic, power shortage, telecommunication failure or other natural or manmade accidents or incidents that result in us being unable to fully utilize our facilities or the manufacturing facilities of our third-party contract manufacturers, or lose our repository of preclinical and clinical human samples and other valuable laboratory samples, may have a material and adverse effect on our ability to operate our business, particularly on a daily basis, and have significant negative consequences on our financial and operating conditions. Loss of access to these facilities may result in increased costs, delays in the development of our drug candidates or interruption of our business operations. Natural disasters such as earthquakes or wildfires, both of which are prevalent in Northern California, floods or tsunamis could further disrupt our operations, and have a material negative impact on our business, financial condition, results of operations 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 research facilities or the manufacturing facilities of our third-party contract manufacturers, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place may prove inadequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which could have a material adverse effect on our business. As part of our risk management policy, we maintain insurance coverage at levels that we believe are appropriate for our business. However, in the event of an accident or incident at these facilities, we cannot assure you that the amounts of insurance will be sufficient to satisfy any damages and losses. If our facilities, or the manufacturing facilities of our third-party contract manufacturers, are unable to operate because of an accident or incident or for any other reason, even for a short period of time, any or all of our research and development programs may be harmed. Any business interruption may have a material and adverse effect on our business and financial condition.

Risks Related to Our Intellectual Property

If we are unable to obtain, maintain, enforce or defend intellectual property rights related to our technology and current or future drug candidates, or if our intellectual property rights are inadequate, we may not be able to compete effectively.

Our success depends in large part on our ability to obtain and maintain protection in the United States and other countries for our intellectual property rights and proprietary technology. We rely on patents and other forms of intellectual property rights to protect our current or future drug discovery and development engine, drug candidates, methods used to manufacture our current or future drug candidates, and methods for treating patients using our current or future drug candidates. We do not currently own any patents or patent applications relating to our proprietary drug discovery and development engine.

The patent prosecution process is expensive, complex and time-consuming. Patent license negotiations also can be complex and protracted, with uncertain results. We may not be able to file, prosecute, maintain, enforce or license all necessary or desirable patents and 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. Although we enter into non-disclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, corporate collaborators, outside scientific 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. The patent applications that we own or may in-license may fail to result in issued patents, and, even if they do issue as patents, such patents may not cover our current or future technologies or drug candidates in the United States or in other countries or provide sufficient protection from competitors. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued and its scope can be reinterpreted after issuance.

Further, although we make reasonable efforts to ensure patentability of our inventions, we cannot guarantee that all of the potentially relevant prior art relating to our patent applications and any issued patents we obtain has been found. For example, publications of discoveries in scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, and in some cases not at all. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our drug discovery and development engine, our drug candidates or the use of our technologies. We thus cannot know with certainty whether we or any of our future licensors were the first to make the inventions claimed in our pending patent applications or any issued patents we obtain, or that we or our any of our future licensors were the first to file for patent protection of such inventions. For this reason, and because there is no guarantee that any prior art search is absolutely correct and comprehensive, we may be unaware of prior art that could be used to invalidate an issued patent or to prevent our pending patent applications from issuing as patents. Invalidation of any of our patent rights, including in-licensed patent rights, could materially harm our business, financial condition, results of operations and prospects.

Moreover, the patent positions of biopharmaceutical companies are generally uncertain because they may involve complex legal and factual considerations that have, in recent years, been the subject of legal development and change. As a result, the issuance, scope, validity, enforceability and commercial value of our pending patent rights is uncertain. The standards applied by the United States Patent and Trademark Office ("USPTO"), and foreign patent offices in granting patents are not always certain and moreover, are not always applied uniformly or predictably. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in patents. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patent rights or narrow the scope of our patent protection.

Even if patents do successfully issue and even if such patents cover our current or any future technologies or drug candidates, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed, invalidated, or held unenforceable. Any successful challenge to any patents we own or may in-license could deprive us of rights necessary for the successful commercialization of any current or future technologies or drug candidates that we may develop. Likewise, if patent applications we own or may in-license with respect to our development programs and current or future technologies or drug candidates fail to issue, if their breadth or strength is threatened, or if they fail to provide meaningful exclusivity, other companies could be dissuaded from collaborating with us to develop current or future technologies or drug candidates. Lack of valid and enforceable patent protection could threaten our ability to commercialize current or future products and could prevent us from maintaining exclusivity with respect to the invention or feature claimed in the patent applications. Any failure to obtain or any loss of patent protection could have a material adverse impact on our business and ability to achieve profitability. We may be unable to prevent competitors from entering the market with a product that is similar to or the same as FLX475, RPT193 or an RPT-GCN2i or other future drug candidates that emerge from our discovery program.

The filing of a patent application or the issuance of a patent is not conclusive as to its ownership, inventorship, scope, patentability, validity or enforceability. Issued patents and patent applications may be challenged in the courts and in the patent office in the United States and abroad. For example, our patent applications or patent applications filed by any of our future licensors may be challenged through third-party submissions, opposition or derivation proceedings. By further example, issued patents may be challenged through reexamination, inter partes review or post-grant review proceedings before the USPTO or patent offices in other jurisdictions, or in declaratory judgment actions or counterclaims. An adverse determination in any such submission, proceeding or litigation could prevent the issuance of, reduce the scope of, invalidate or render unenforceable our patent rights; limit our ability to stop others from using or commercializing similar or identical products; allow third parties 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 patent rights is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future drug candidates. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

Moreover, some of our intellectual property, including patents and patent applications, are or may in the future be co-owned with third parties. If we are unable to obtain an exclusive license to any such third-party co-owners' interest in such intellectual property, including 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. We may need the cooperation of any such co-owners of our patent rights to enforce such patent rights against third parties, and such cooperation may not be provided to us. Any of the foregoing could have a material adverse effect on our competitive position, business prospects and financial conditions.

If we fail to comply with our obligations under any license, collaboration or other intellectual property-related agreements, we may be required to pay damages and could lose intellectual property rights that may be necessary for developing, commercializing and protecting our current or future technologies or drug candidates or we could lose certain rights to grant sublicenses.

Any license, collaboration or other intellectual property-related agreements impose, and any future license, collaboration or other intellectual property-related agreements we enter into are likely to impose, various development, commercialization, funding, milestone, royalty, diligence, sublicensing, insurance, patent prosecution and enforcement or other obligations on us. If we breach any of these obligations, or use the intellectual property licensed to us in an unauthorized manner, we may be required to pay damages and the licensor may have the right to terminate the license. In spite of our best efforts, any of our future licensors might conclude that we have materially breached our license agreements and might therefore terminate the license agreements, thereby removing our ability to develop and commercialize products and technologies covered by

these license agreements. Any license agreements we enter into may be complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

We may seek to obtain licenses from licensors in the future, however, we may be unable to obtain any such licenses at a reasonable cost or on reasonable terms, if at all. In addition, any of our future licensors terminate any such license agreements, such license termination could result in our inability to develop, manufacture and sell products that are covered by the licensed technology or could enable a competitor to gain access to the licensed technology. Any of these events could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and ability to achieve profitability.

Furthermore, we may not have the right to control the preparation, filing, prosecution, maintenance, enforcement and defense of patents and patent applications that we license from third parties. Therefore, we cannot be certain that these patents and patent applications will be prepared, filed, prosecuted, maintained, enforced and defended in a manner consistent with the best interests of our business. If our future licensors fail to prosecute, maintain, enforce and defend patents we may in-license, or lose rights to licensed patents or patent applications, our license rights may be reduced or eliminated. In such circumstances, our right to develop and commercialize any of our products or drug candidates that is the subject of such licensed rights could be materially adversely affected. In certain circumstances, our licensed patent rights are subject to our reimbursing our licensors for their patent prosecution and maintenance costs.

Moreover, 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, misappropriating or otherwise violating the licensor's intellectual property rights and the amount of any damages or future royalty obligations that would result if any such claims were successful would depend on the technology and intellectual property we use in products that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize products, we may be unable to achieve or maintain profitability.

Patent terms may not be able to protect our competitive position for an adequate period of time with respect to our current or future technologies or drug candidates.

Patents have a limited lifespan. In the United States, the standard patent term is typically 20 years after filing. Various extensions may be available. Even so, the life of a patent and the protection it affords are limited. As a result, our patent portfolio provides us with limited rights that may not last for a sufficient period of time to exclude others from commercializing products similar or identical to ours. For example, given the large amount of time required for the research, development, testing and regulatory review of new drug candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized.

Extensions of patent term may be available, but there is no guarantee that we would succeed in obtaining any particular extension—and no guarantee any such extension would confer patent term for a sufficient period of time to exclude others from commercializing products similar or identical to ours. In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication (or any additional indications approved during the period of extension). A patent term extension cannot extend the remaining term of a patent beyond 14 years from the date of product approval; only one patent may be extended; and extension is available for only those claims covering the approved drug, a method for using it, or a method for manufacturing it. The applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to any patents we obtain, or may grant

more limited extensions than we request. An extension may not be granted or may be limited where there is, for example, a failure to exercise due diligence during the testing phase or regulatory review process, failure to apply within applicable deadlines, failure to apply before expiration of relevant patents, or some other failure to satisfy applicable requirements. If this occurs, our competitors may be able to launch their products earlier by taking advantage of our investment in development and clinical trials along with our clinical and preclinical data. This could have a material adverse effect on our business and ability to achieve profitability.

Changes in U.S. patent law or the patent law of other countries or jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our current or any future technologies or drug candidates.

Changes in either the patent laws or interpretation of the patent laws in the United States or elsewhere could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. The United States has enacted and implemented wide-ranging patent reform legislation. On September 16, 2011, the Leahy-Smith America Invents Act (the "Leahy-Smith Act"), was signed into law, which could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of any issued patents we obtain. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications are prosecuted, redefine prior art, may affect patent litigation and switch the U.S. patent system from a "first-to-invent" system to a "first-to-file" system. Under a first-to-file system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to the patent on an invention regardless of whether another inventor had made the invention earlier. These provisions also allow third-party submission of prior art to the USPTO during patent prosecution and set forth additional procedures to challenge the validity of a patent by the USPTO administered post grant proceedings, including derivation, reexamination, inter partes review, post-grant review and interference proceedings. The USPTO developed additional 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, and, in particular, the first-to-file provisions, became effective on March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of any issued patents we obtain,

As referenced above, for example, courts in the U.S. continue to refine the heavily fact-and-circumstance-dependent jurisprudence defining the scope of patent protection available for therapeutics, narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. This creates uncertainty about our ability to obtain patents in the future and the value of such patents. We cannot provide assurance that future developments in U.S. Congress, the federal courts and the USPTO will not adversely impact our patent rights. The laws and regulations governing patents could change in unpredictable ways that could weaken our and our licensors' ability to obtain new patents or to enforce our existing patent rights or patent rights that we might obtain or in-license in the future. Similarly, changes in patent law and regulations in other countries or jurisdictions or changes in the governmental bodies that enforce them or changes in how the relevant governmental authority enforces patent laws or regulations may have a material adverse effect on our and our licensors' ability to obtain new patents or to protect and enforce our owned or in-licensed patent rights or patent rights that we may obtain or in-license in the future.

Other companies or organizations may challenge our patent rights or may assert patent rights that prevent us from developing and commercializing our current or future products.

Third parties may attempt to invalidate our intellectual property rights. Even if such rights are not directly challenged, disputes could lead to the weakening of our intellectual property rights. Our defense against any attempt by third parties to circumvent or invalidate our intellectual property rights could be costly to us,

could require significant time and attention of our management, and could have a material and adverse impact on our profitability, financial condition and prospects or ability to successfully compete.

Further, we cannot guarantee that we are aware of all patents and patent applications potentially relevant to our technology or products. There may be issued and pending patents that claim aspects of our current or potential future drug candidates and modifications that we may need for our current or potential future drug candidates. We may not be aware of potentially relevant third-party patents or applications for several reasons. For example, U.S. applications filed before November 29, 2000, and certain U.S. applications filed after that date that will not be filed outside the U.S. remain confidential until patents issue. 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 drug candidates or technologies could have been filed by others 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 drug candidates or the use of our technologies.

We may be subject to priority disputes, inventorship disputes and similar proceedings that could, if resolved unfavorably, narrow the scope of our intellectual property protection. We cannot provide any assurances that third-party patents do not exist which might be enforced against our drug candidates or technologies or future methods or products, resulting in either an injunction prohibiting our manufacture or sales, or, with respect to our sales, an obligation on our part to pay royalties or other forms of compensation to third parties, which could be significant.

Thus, it is possible that one or more third parties will hold patent rights to which we will need a license, which may not be available on reasonable terms or at all. If such third parties refuse to grant us a license to such patent rights on reasonable terms or at all, we may be required to expend significant time and resources to redesign our technology, drug candidates or the methods for manufacturing our drug candidates, or to develop or license replacement technology, all of which may not be commercially or technically feasible. In such case, we may not be able to market such technology or drug candidates and may not be able to perform research and development or other activities covered by these patents. This could have a material adverse effect on our ability to commercialize our drug candidates and our business and financial condition.

We may not be able to protect our intellectual property rights throughout the world, which could negatively impact our business.

Filing, prosecuting and defending patents on current or future technologies or drug candidates in all countries throughout the world would be prohibitively expensive. Competitors or other third parties may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export infringing products to territories where we have patent protection or licenses but enforcement is not as strong as that in the United States. These products may compete with our products, and our patent or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Additionally, the laws of some foreign jurisdictions do not protect intellectual property rights to the same extent as the 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. Many companies have encountered significant difficulties in protecting and defending intellectual property rights in such foreign jurisdictions. The legal systems of certain countries, including certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us to stop the infringement of our patent rights or the marketing of competing products in violation of our intellectual property and proprietary rights generally. Proceedings to enforce our intellectual property and proprietary rights in foreign jurisdictions could result in substantial costs and could divert our efforts and attention from other aspects of our business. Such proceedings could also put our patent

rights at risk of being invalidated or interpreted narrowly, could put our patent applications at risk of not issuing, and could provoke third parties to assert claims against us or any of our future licensors. We may not prevail in any lawsuits or other adversarial proceedings that we initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce such intellectual property and proprietary rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or in-license.

Further, many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of its patents. If we or any of our licensors are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position in the relevant jurisdiction may be impaired and our business prospects, financial condition and results of operations may be materially adversely affected.

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 have a material adverse impact on the success of our business.

Our commercial success depends, in part, upon our ability or the ability of any of our future collaborators to develop, manufacture, market and sell our current or any future drug candidates and to use our proprietary technologies without infringing, misappropriating or otherwise violating the proprietary and intellectual property rights of third parties. The biotechnology and pharmaceutical industries are characterized by extensive and complex litigation regarding patents and other intellectual property rights.

We or any of our future licensors or strategic partners, may be party to, or be threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our current or any potential future drug candidates and technologies, including derivation, reexamination, inter partes review, post-grant review or interference proceedings before the USPTO and similar proceedings in jurisdictions outside of the United States such as opposition proceedings. If we or our licensors or strategic partners are unsuccessful in any interference proceedings or other priority or validity disputes (including through any patent oppositions) to which we or they are subject, we may lose valuable intellectual property rights through the loss of one or more patents or our patent claims may be narrowed, invalidated, or held unenforceable. In some instances, we may be required to indemnify our licensors or strategic partners for the costs associated with any such adversarial proceedings or litigation. Third parties may also assert infringement, misappropriation or other claims against us, our licensors or our strategic partners based on existing patents or patents that may be granted in the future, as well as other intellectual property rights, regardless of their merit. There is a risk that third parties may choose to engage in litigation or other adversarial proceedings with us, our licensors or our strategic partners to enforce or otherwise assert their patent rights or other intellectual property rights. Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third-party patents and other intellectual property rights are valid, enforceable and infringed, which could have a material adverse impact on our ability to utilize our drug discovery and development engine or to commercialize our current or any future drug candidates. 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 by presenting clear and convincing evidence of invalidity. There is no assurance that a court of competent jurisdiction, even if presented with evidence we believe to be clear and convincing, would invalidate the claims of any such U.S. patent.

Further, we cannot guarantee that we will be able to successfully settle or otherwise resolve such adversarial proceedings or litigation. If we are unable to successfully settle future claims on terms acceptable to us, we may be required to engage in or to continue costly, unpredictable and time-consuming litigation and may be prevented from or experience substantial delays in marketing our drug candidates. If we or any of our licensors or strategic partners are found to infringe, misappropriate or violate a third-party patent or other

intellectual property rights, we could be required to pay damages, including treble damages and attorney's fees, if we are found to have willfully infringed. In addition, we, or any of our licensors or strategic partners may choose to seek, or be required to seek, a license from a third party, which may not be available on commercially reasonable terms, if at all. Even if a license can be obtained on commercially reasonable terms, the rights may be non-exclusive, which could give our competitors access to the same technology or intellectual property rights licensed to us, and we could be required to make substantial licensing and royalty payments. We also could be forced, including by court order, to cease utilizing, developing, manufacturing and commercializing our drug discovery and development engine or drug candidates deemed to be infringing. We may be forced to redesign current or future technologies or products. Any of the foregoing could have a material adverse effect on our ability to generate revenue or achieve profitability and possibly prevent us from generating revenue sufficient to sustain our operations.

In addition, we or our licensors or strategic partners may find it necessary to pursue claims or to initiate lawsuits to protect or enforce our patent or other intellectual property rights. If we or our licensors or strategic partners were to initiate legal proceedings against a third party to enforce a patent covering one of our drug candidates or our technology, the defendant could counterclaim that such 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, for example, claiming patent-ineligible subject matter, lack of novelty, indefiniteness, lack of written description, non-enablement, anticipation or obviousness. 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. The outcome of such invalidity and unenforceability claims is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art of which we or our licensors or strategic partners and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we could lose at least part, and perhaps all, of the patent protection for one or more of our drug candidates. The narrowing or loss of our owned and licensed patent claims could limit our ability to stop others from using or commercializing similar or identical technology and products. All of these events could have a material adverse effect on our business, financial condition, results of operations and prospects. Patent and other intellectual property rights also will not protect our drug candidates and technologies if competitors or third parties design around such drug candidates and technolog

The cost to us in defending or initiating any litigation or other proceeding relating to our patent or other intellectual property rights, even if resolved in our favor, could be substantial, and any litigation or other proceeding would divert our management's attention and distract our personnel from their normal responsibilities. Such litigation or proceedings could materially 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. Some of our competitors may be able to more effectively to sustain the costs of complex patent litigation because they have substantially greater resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could delay our research and development efforts and materially limit our ability to continue our operations. Furthermore, because of the substantial amount of discovery required in connection with certain such proceedings, there is a risk that some of our confidential information could be compromised by disclosure. 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, such announcements could have a material adverse effect on the price of our common stock.

Intellectual property rights of third parties could adversely affect our ability to commercialize our current or future technologies or drug candidates, and we might be required to litigate or obtain licenses from third parties to develop or market our current or future technologies or drug candidates, which may not be available on commercially reasonable terms or at all.

Because the immuno-oncology and inflammation disease landscapes are still evolving, it is difficult to conclusively assess our freedom to operate. Thus, we may unknowingly pursue development of a product or technology that infringes, misappropriates or otherwise violates third-party rights. There are numerous companies that have pending patent applications and issued patents broadly covering immune-therapies generally or covering small molecules directed against the same targets as, or targets similar to, those we are pursuing. Our competitive position may materially suffer if patents issued to third parties or other third-party intellectual property rights cover our current or future technologies drug candidates or elements thereof or our manufacture or uses relevant to our development plans. In such cases, we may not be in a position to develop or commercialize current or future technologies, drug candidates unless we successfully pursue litigation to nullify or invalidate the third-party intellectual property right concerned, or enter into a license agreement with the intellectual property right holder, if available on commercially reasonable terms. There may be issued patents of which we are not aware, held by third parties that, if found to be valid and enforceable, could be alleged to be infringed by our current or future technologies or drug candidates. There also may be pending patent applications of which we are not aware that may result in issued patents, which could be alleged to be infringed by our current or future technologies or drug candidates. Should such an infringement claim be successfully brought, we may be required to pay substantial damages or be forced to abandon our current or future technologies or drug candidates or to seek a license from any patent holders. No assurances can be given that a license will be available on commercially reasonable terms, if at all.

Third-party intellectual property right holders may also actively bring infringement, misappropriation or other claims alleging violations of intellectual property rights against us. We cannot guarantee that we will be able to successfully settle or otherwise resolve such claims. If we are unable to successfully settle future claims on terms acceptable to us, we may be required to engage in or to continue costly, unpredictable and time-consuming litigation and may be prevented from or experience substantial delays in marketing our drug candidates. If we fail in any such dispute, in addition to being forced to pay damages, we may be temporarily or permanently prohibited from commercializing any of our current or future technologies or drug candidates that are held to be infringing, misappropriating or otherwise violating third-party intellectual property rights. We might, if possible, also be forced to redesign current or future technologies or drug candidates so that we no longer infringe, misappropriate or violate 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, which could have a material adverse effect on our financial condition and results of operations.

We may not be successful in obtaining necessary or exclusive rights to any drug candidates or products we may develop through acquisitions and in-licensing.

We may be unable to acquire or otherwise in-license any compositions, methods of use, processes, or other intellectual property rights from third parties that we identify as necessary for drug candidates that we may wish to develop. The licensing or acquire third-party intellectual property rights is a competitive area, and several more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These 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 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 successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant program or drug candidates, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Patent rights we may in-license in the future may be subject to a reservation of rights by one or more third parties. For example, the research resulting in any in-licensed patent rights and technology may be funded in part by the U.S. government. As a result, the government may have certain rights, or 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 non-commercial purposes. These rights may permit the government to disclose our confidential information to third parties and to exercise march-in rights to use 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 exercise by the U.S. government of such rights could harm our competitive position, 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.

As referenced above, in addition to seeking patent protection for certain aspects of our current or future technologies and drug candidates, we also consider trade secrets, including confidential and unpatented know-how, important to the maintenance of our competitive position. However, trade secrets and know-how can be difficult to protect. We protect and plan to protect trade secrets and confidential and unpatented know-how, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to such knowledge, such as our employees, corporate collaborators, outside scientific 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 under which they are obligated to maintain confidentiality and to assign their inventions to us. Despite these efforts, we may not obtain these agreements in all circumstances and we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary information.

Moreover, individuals with whom we have such agreements may not comply with their terms. Any of these parties may breach such agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for any such breaches. We may be forced to bring claims against third parties, including current or former employees or consultants, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property, including our patent rights. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret, or securing title to an employee- or consultant-developed invention if a dispute arises, is difficult, expensive and time-consuming, and the outcome is unpredictable. If we are unsuccessful in any inventorship disputes to which we are subject, we may lose valuable intellectual property rights, such as ownership of our patent rights. In addition, some courts in the United States and certain foreign jurisdictions disfavor or are unwilling to protect trade secrets. Further, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent that competitor from using the technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor, our competitive position would be materially and adversely harmed.

We may be subject to claims that we or our employees or consultants have wrongfully used or disclosed alleged trade secrets or other proprietary information of our employees' or consultants' former employers or their clients.

Many of our employees or consultants and our licensors' employees or consultants were previously employed at universities or biotechnology or biopharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees and consultants do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that one or more of these

employees or consultants or we have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information of any such individual's current or former employers. Litigation or arbitration may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or may be enjoined from using such intellectual property. Any such proceedings and possible aftermath would likely divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. A loss of key research personnel or their work product could limit our ability to commercialize, or prevent us from commercializing, our current or future technologies or drug candidates, which could materially harm our business. Even if we are successful in defending against any such claims, litigation or arbitration could result in substantial costs and could be a distraction to management.

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

Periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents or applications will be due to be paid to the USPTO and various government patent agencies outside of the United States over the lifetime of our patent rights and any patent rights we may own or in-license in the future. The USPTO and various non-U.S. government patent agencies require compliance with several procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply with these requirements, and we may also be dependent on our licensors to take the necessary action to comply with these requirements with respect to our in-licensed intellectual property. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. There are situations, however, in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the market with similar or identical products, which could have a material adverse effect on our business prospects and financial condition.

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 trademarks or trade names may be challenged, infringed, circumvented, declared generic or determined to be infringing on other marks. We own a pending U.S. trademark application, but do not yet own a U.S. registered trademark, for our corporate name, "RAPT." We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names, which we use for name recognition by potential partners or customers in our markets of interest. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be materially adversely affected.

Intellectual property rights do not necessarily address all potential threats to our business.

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. The following examples are illustrative:

- others may be able to make small molecule drugs, inhibitors or formulations that are similar to our drug candidates, but that are not covered by the claims of any patents that we own, license or control;
- we or any strategic partners might not have been the first to make the inventions covered by the patent rights that we own, license or control:

- we or our licensors might not have been the first to file patent applications covering certain of our owned and in-licensed inventions;
- others may independently develop the same, similar, or alternative technologies without infringing, misappropriating or violating our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we may own, in-license, or control may not provide us with any competitive advantages, or may be narrowed or held invalid or unenforceable, including as a result of legal challenges;
- our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor
 from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent
 rights, and may then use the information learned from such activities to develop competitive products for sale in our major commercial
 markets;
- 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 trade secrets or know-how; and
- the patents of others may have an adverse effect on our business.

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

Risks Related to Government Regulation

Clinical development includes a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

Our drug candidates FLX475 and RPT193 are in clinical and preclinical development, respectively, and their risk of failure is high. It is impossible to predict when or if our candidates or any potential future drug candidates will prove effective in humans or will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of any drug candidate, we must complete preclinical studies for RPT193 and other potential future candidates and then conduct extensive clinical trials to demonstrate the safety and efficacy of that drug candidate 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 development process. The results of preclinical studies and clinical trials of any of our current or potential future drug candidates may not be predictive of the results of later-stage clinical trials. Drug candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. A number of companies in the pharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or safety profiles, notwithstanding promising results in earlier trials.

We are conducting a Phase 1/2 clinical trial investigating FLX475 as a single agent and in combination with pembrolizumab in a broad range of tumors and we anticipate that initial data from this trial will be available by the first half of 2020. Further, we expect to initiate a clinical trial for RPT193 in the second half of 2019 with PoC data expected by mid-2020. Despite these plans, we may experience delays in initiating or completing our clinical trials. We do not know whether planned clinical trials will be completed on schedule or at all, or whether planned clinical trials will begin on time, need to be redesigned, enroll patients on time or be completed on

schedule, if at all. Our development programs may be delayed for a variety of reasons, including delays related to:

- the FDA or other regulatory authorities requiring us to submit additional data or imposing other requirements before permitting us to initiate a clinical trial;
- obtaining regulatory approval to commence a clinical trial;
- reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;
- obtaining institutional review board ("IRB"), approval at each clinical trial site;
- recruiting suitable patients to participate in a clinical trial;
- having patients complete a clinical trial or return for post-treatment follow-up;
- clinical trial sites deviating from trial protocol or dropping out of a trial;
- · adding new clinical trial sites; or
- manufacturing sufficient quantities of our drug candidates for use in clinical trials.

Furthermore, we expect to rely on our CROs and clinical trial sites to ensure the proper and timely conduct of our clinical trials and, while we expect to enter into agreements governing their committed activities, we have limited influence over their actual performance.

We could encounter delays if prescribing physicians encounter unresolved ethical issues associated with enrolling patients in clinical trials of our current or potential future drug candidates in lieu of prescribing existing treatments that have established safety and efficacy profiles. Further, a clinical trial may be suspended or terminated by us, our partners, the IRBs of the institutions in which such trials are being conducted, the Data Safety Monitoring Board for such trial or by the FDA or other regulatory authorities due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other 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 drug or therapeutic biologic, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. If we experience delays in the completion of, or termination of, any clinical trial of any of our current or potential future drug candidates, the commercial prospects of such drug candidate will be harmed, and our ability to generate product revenue from such drug candidates will be delayed. In addition, any delays in completing our clinical trials will increase our costs, slow our product development and approval process and jeopardize our ability to commence product sales and generate revenue. Any of these occurrences may materially and adversely affect our business, financial condition, results of operations and prospects. 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 current or potential future drug candidates.

We may be unable to obtain U.S. or foreign regulatory approval and, as a result, be unable to commercialize FLX475, RPT193 or an RPT-GCN2i or other future drug candidate.

FLX475, RPT193, an RPT-GCN2i and other future drug candidates are and will be subject to extensive governmental regulations relating to, among other things, research, testing, development, manufacturing, safety,

efficacy, approval, recordkeeping, reporting, labeling, storage, packaging, advertising and promotion, pricing, marketing and distribution of drugs and therapeutic biologics. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process are required to be successfully completed in the U.S. and in many foreign jurisdictions before a new drug, therapeutic or biologic can be marketed. Satisfaction of these and other regulatory requirements is costly, time-consuming, uncertain and subject to unanticipated delays. It is possible that none of the drug candidates we may develop will obtain the regulatory approvals necessary for us or our potential future partners to begin selling them.

We have very limited experience in conducting and managing the clinical trials necessary to obtain regulatory approvals, including approval by the FDA. The time required to obtain FDA and other approvals is unpredictable but typically takes many years following the commencement of clinical trials, depending upon the type, complexity and novelty of the drug candidate. The standards that the FDA and its foreign counterparts use when regulating us require judgment and can change, which makes it difficult to predict with certainty how they will be applied. Any analysis we perform of data from preclinical and clinical activities is subject to confirmation and interpretation by regulatory authorities, which could delay, limit or prevent regulatory approval. We may also encounter unexpected delays or increased costs due to new government regulations, for example, from future legislation or administrative action, or from changes in FDA policy during the period of product development, clinical trials and FDA regulatory review. It is impossible to predict whether legislative changes will be enacted, or whether FDA or foreign regulations, guidance or interpretations will be changed, or what the impact of such changes, if any, may be.

Any delay or failure in obtaining required approvals could have a material and adverse effect on our ability to generate revenue from the particular drug candidate for which we are seeking approval. Further, we and our potential future partners may never receive approval to market and commercialize any drug candidate. Even if we or a potential future partner obtains regulatory approval, the approval may be for targets, disease indications or patient populations that are not as broad as we intended or desired or may require labeling that includes significant use or distribution restrictions or safety warnings. We or a potential future partner may be subject to post-marketing testing requirements to maintain regulatory approval. If any of our drug candidates prove to be ineffective, unsafe or commercially unviable, we may have to re-engineer FLX475, RPT193 or an RPT-GCN2i or other future drug candidate, and our entire pipeline could have little, if any, value, which could require us to change our focus and approach to small molecule discovery and development, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

We are also subject to numerous foreign regulatory requirements governing, among other things, the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process varies among countries and may include all of the risks associated with FDA approval described above as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Moreover, the time required to obtain approval may differ from that required to obtain FDA approval by the FDA does not ensure approval by regulatory authorities outside the United States and vice versa.

Even if we receive regulatory approval for any of our current or potential future drug candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense. Additionally, our current or potential future drug candidates, if approved, could be subject to labeling and other restrictions and market withdrawal and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our products.

Any regulatory approvals that we or potential future partners obtain for FLX475, RPT193 or an RPT-GCN2i or other future drug candidate may also be subject to limitations on the approved indicated uses for which a product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including "Phase 4" clinical trials, and surveillance to monitor the safety and efficacy of such drug candidate. In addition, if the FDA or other regulatory authority approves FLX475, RPT193 or an

RPT-GCN2i or other future drug candidate, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, import, export, advertising, promotion and recordkeeping for such product 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 cGMP and good clinical practices for any clinical trials that we conduct post-approval. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, withdrawal of the product from the market or voluntary or mandatory product recalls;
- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or our strategic partners;
- suspension or revocation of product license approvals;
- · product seizure or detention or refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our drug candidates. 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, which would adversely affect our business.

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 Patient Protection and Affordable Care Act (the "ACA"), was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the U.S. pharmaceutical industry. Among the provisions of the ACA, of greatest importance to the pharmaceutical and biotechnology industry are the following:

- an annual, nondeductible fee on any entity that manufactures or imports certain specified branded prescription drugs and biologic agents apportioned among these entities according to their market share in some government healthcare programs;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for most branded and generic drugs, respectively, and capped the total rebate amount for innovator drugs at 100% of the Average Manufacturer Price ("AMP");
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs and biologics that are inhaled, infused, instilled, implanted or injected;

- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for individuals with income at or below 133% of the federal poverty level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% (and 70% as of January 1, 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- · expansion of the entities eligible for discounts under the Public Health program;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- establishment of a Center for Medicare Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending; and
- implementation of the federal physician payment transparency requirements, sometimes referred to as the "Physician Payments Sunshine Act".

Some of the provisions of the ACA have yet to be fully implemented, and there have been legal and political challenges to certain aspects of the ACA. Since January 2017, President Trump has signed two executive orders and other directives designed to delay, circumvent, or loosen certain requirements 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 (the "Tax Act"), includes a provision that repealed, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year, that is commonly referred to as the "individual mandate." 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 ("BBA"), among other things, amended the ACA, effective January 1, 2019, to close the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." In July 2018, CMS published a final rule permitting further collections and payments to and from certain ACA qualified health plans and health insurance issuers under the ACA risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas ruled that the individual mandate is an inseverable feature of the ACA, and therefore, because it was repealed as part of the Tax 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, it is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the ACA will impact the ACA and our business.

In addition, 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, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required

goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers 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. Additionally, there has been heightened governmental scrutiny recently over the manner in which manufacturers set prices for their marketed products. For example, there have been several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Further, the Trump administration released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. In addition, on January 31, 2019, the HHS Office of Inspector General, proposed modifications to the federal Anti-Kickback Statute discount safe harbor for the purpose of reducing the cost of drug products to consumers which, among other things, if finalized, will affect discounts paid by manufacturers to Medicare Part D plans, Medicaid managed care organizations and pharmacy benefit managers working with these organizations. Although a number of these, and other potential, proposals will require additional authorization to become effective, Congress and the executive branch have each indicated that it will continue to seek new legislative or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures and, in some cases, designed to encourage importation from other countries and bulk purchasing. These new laws and initiatives may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on our future customers and accordingly, our financial operations.

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

If we or potential future partners, manufacturers or service providers fail to comply with healthcare laws and regulations, we or they could be subject to enforcement actions, which could affect our ability to develop, market and sell our products and may harm our reputation.

Healthcare providers, physicians and third-party payors, among others, will play a primary role in the prescription and recommendation of any drug candidates for which we obtain marketing approval. Our current and future arrangements with third-party payors, providers and customers, among others, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute our drug candidates for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include the following:

• the federal Anti-Kickback Statute, which prohibits, among other things, a person or entity from knowingly and willfully soliciting, offering, paying, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, lease order, arranging for or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, by a federal healthcare program, such as

Medicare or Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, a violation of the Anti-Kickback Statute can form the basis for a violation of the federal False Claims Act (discussed below);

- federal civil and criminal false claims laws and civil monetary penalties laws, including the federal False Claims Act, which provides for civil whistleblower or qui tam actions, that impose penalties against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a referral made in violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;
- HIPAA, which imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program, or knowingly and
 willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery
 of or payment for healthcare benefits, items or services. Similar to the federal Anti-Kickback Statute, a person or entity does not need to
 have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- HIPAA, as amended by HITECH, and its implementing regulations, including the Final Omnibus Rule published in January 2013, which impose obligations on certain covered entity healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information, and require notification to affected individuals and regulatory authorities of certain breaches of security of individually identifiable health information;
- the federal false statements statute, which prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of or payment for healthcare benefits, items or services;
- the federal transparency requirements known as the federal Physician Payments Sunshine Act, created as part of ACA, which 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 to report annually to CMS information related to payments and other transfers of value made by
 that entity to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate
 family members; and
- analogous local, state and foreign laws and regulations, such as state anti-kickback and false claims laws that may apply to healthcare items or services reimbursed by third-party payors, including private insurers; local, state and foreign transparency laws that require manufacturers to report information related to payments and transfers of value to other healthcare providers and healthcare entities, marketing expenditures, or drug pricing; state laws that require pharmaceutical companies to register certain employees engaged in marketing activities in the location and comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Ensuring that our future business arrangements with third parties comply with applicable healthcare laws and regulations could involve substantial costs. If our operations are found to be in violation of any such requirements, we may be subject to penalties, including criminal and significant civil monetary penalties, damages, fines, individual imprisonment, disgorgement, contractual damages, reputational harm, exclusion from participation in government healthcare programs, integrity obligations, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, private qui tam actions brought by individual whistleblowers in the name of the government, refusal to allow us to enter into supply contracts, including government contracts, additional reporting requirements and oversight if subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. Although effective compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, these risks cannot be entirely eliminated. Any action against us for an alleged or suspected violation could cause us to incur significant legal expenses and could divert our management's attention from the operation of our business, even if our defense is successful. In addition, achieving and sustaining compliance with applicable laws and regulations may be costly to us in terms of money, time and resources.

If we fail to comply with U.S. and foreign regulatory requirements, regulatory authorities could limit or withdraw any marketing or commercialization approvals we may receive and subject us to other penalties that could materially harm our business.

Even if we receive marketing and commercialization approval of a drug candidate, we will be subject to continuing regulatory requirements, including in relation to adverse patient experiences with the product and clinical results that are reported after a product is made commercially available, both in the United States and any foreign jurisdiction in which we seek regulatory approval. The FDA has significant post-market authority, including the authority to require labeling changes based on new safety information and to require post-market studies or clinical trials to evaluate safety risks related to the use of a product or to require withdrawal of the product from the market. The FDA also has the authority to require a Risk Evaluation and Mitigation Strategy ("REMS"), after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug or therapeutic biologic. The manufacturer and manufacturing facilities we use to make a future product, if any, will also be subject to periodic review and inspection by the FDA and other regulatory agencies, including for continued compliance with cGMP requirements. The discovery of any new or previously unknown problems with our third-party manufacturers, manufacturing processes or facilities may result in restrictions on the product, manufacturer or facility, including withdrawal of the product from the market. We intend to rely on third-party manufacturers and we will not have control over compliance with applicable rules and regulations by such manufacturers. Any product promotion and advertising will also be subject to regulatory requirements and continuing regulatory review. If we or our existing or future partners, manufacturers or service providers fail to comply with applicable continuing regulatory requirements in the U.S. or foreign jurisdictions in which we seek to market our products, we or they may be subject to, among other things, fines, warning letters, holds on clinical trials, delay of approval or refusal by the FDA to approve pending applications or supplements to approved applications, suspension or withdrawal of regulatory approval, product recalls and seizures, administrative detention of products, refusal to permit the import or export of products, operating restrictions, injunction, civil penalties and criminal prosecution.

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

Our ability to commercialize any products successfully will depend, in part, on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from third-party payors, such as government authorities, private health insurers and health maintenance organizations. Patients who are prescribed medications for the treatment of their conditions generally rely on third-party payors to

reimburse all or part of the costs associated with their prescription drugs. Coverage and adequate reimbursement from government healthcare programs, such as Medicare and Medicaid, and private health insurers are critical to new product acceptance. Patients are unlikely to use our future products, if any, unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost.

Cost-containment is a priority in the U.S. healthcare industry and elsewhere. As a result, government authorities and other third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Third-party payors also may request additional clinical evidence beyond the data required to obtain marketing approval, requiring a company to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of its product. Commercial third-party payors often rely upon Medicare coverage policy and payment limitations in setting their reimbursement rates, but also have their own methods and approval process apart from Medicare determinations. Therefore, coverage and reimbursement for pharmaceutical products in the U.S. can differ significantly from payor to payor. We cannot be sure that coverage and adequate reimbursement will be available for any product that we commercialize and, if reimbursement is available, that the level of reimbursement will be adequate. Coverage and reimbursement may impact the demand for, or the price of, any drug candidate for which we obtain marketing approval. If coverage and reimbursement are not available or are available only at limited levels, we may not be able to successfully commercialize any drug candidate for which we obtain marketing approval.

Additionally, the regulations that govern regulatory approvals, pricing and reimbursement for new drugs and therapeutic biologics vary widely from country to country. Some countries require approval of the sale price of a drug or therapeutic biologic 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 regulatory approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more drug candidates, even if our drug candidates obtain regulatory approval.

We are subject to U.S. and foreign anti-corruption and anti-money laundering laws with respect to our operations and non-compliance with such laws can subject us to criminal or civil liability and harm our business.

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended ("the FCPA"), the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and possibly other state and national anti-bribery and anti-money laundering laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, third-party intermediaries, joint venture partners and collaborators from authorizing, promising, offering or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We interact with officials and employees of government agencies and government-affiliated hospitals, universities and other organizations. In addition, we may engage third-party intermediaries to promote our clinical research activities abroad or to obtain necessary permits, licenses and other regulatory approvals. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners and agents, even if we do not explicitly authorize or have actual knowledge of such activities.

In connection with this offering, we will adopt a Code of Business Conduct and Ethics that will be effective upon the closing of this offering and we expect to prepare and implement policies and procedures to ensure compliance with such code. The Code of Business Conduct and Ethics mandates compliance with the FCPA and other anti-corruption laws applicable to our business throughout the world. However, we cannot assure you that our employees and third-party intermediaries will comply with this code or such anti-corruption

laws. Noncompliance with anti-corruption and anti-money laundering laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage and other collateral consequences. If any subpoenas, investigations or other enforcement actions are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and significant defense and compliance costs and other professional fees. In certain cases, enforcement authorities may even cause us to appoint an independent compliance monitor which can result in added costs and administrative burdens.

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

On December 20, 2017, the U.S. Congress passed the Tax Act, enacting comprehensive tax legislation that includes significant changes to the taxation of business entities. These changes include, among others: a permanent reduction to the corporate income tax rate; a partial limitation on the deductibility of business interest expense; a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system (along with certain rules designed to prevent erosion of the U.S. income tax base); and a one-time tax on accumulated offshore earnings held in cash and illiquid assets, with the latter taxed at a lower rate. Notwithstanding the reduction in the corporate income tax rate, the overall impact of this tax reform remains uncertain, and our business and financial condition could be adversely affected. This prospectus does not provide an in-depth discussion of any such tax legislation or the manner in which it might affect purchasers of our common stock. We urge our stockholders to consult with their legal and tax advisors with respect to any such legislation and the potential tax consequences of investing in our common stock.

Risks Related to Our Common Stock and this Offering

Our quarterly operating results may fluctuate significantly or may fall below the expectations of investors or securities analysts, each of which may cause our stock price to fluctuate or decline.

We expect our operating results to be subject to quarterly fluctuations. Our net loss and other operating results will be affected by numerous factors, including:

- variations in the level of expense related to the ongoing development of our drug candidates or future development programs;
- results of clinical trials, or the addition or termination of clinical trials or funding support by us or potential future partners;
- our execution of any collaboration, licensing or similar arrangements, and the timing of payments we may make or receive under
 potential future arrangements or the termination or modification of any such potential future arrangements;
- any intellectual property infringement, misappropriation or violation lawsuit or opposition, interference or cancellation proceeding in which we may become involved;
- additions and departures of key personnel;
- strategic decisions by us or our competitors, such as acquisitions, divestitures, spin-offs, joint ventures, strategic investments or changes in business strategy;

- if any of our drug candidates receives regulatory approval, the terms of such approval and market acceptance and demand for such drug candidates;
- · regulatory developments affecting our drug candidates or those of our competitors; and
- · changes in general market and economic conditions.

If our quarterly operating results fall below the expectations of investors or securities analysts, the price of our common stock could decline substantially. Furthermore, any quarterly fluctuations in our operating results may, in turn, cause the price of our stock to fluctuate substantially. We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as an indication of our future performance.

Our stock price may be volatile and purchasers of our common stock could incur substantial losses.

Our stock price is likely to be volatile. As a result of this volatility, investors may not be able to sell their 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 other risks described in this section of the prospectus titled "Risk Factors" and the following:

- our ability to advance FLX475, RPT193 or other potential future drug candidates in the clinic;
- results of our preclinical studies, non-clinical studies and clinical trials for our current and future drug candidates or those of our competitors or potential future partners;
- regulatory or legal developments in the United States and other countries, especially changes in laws or regulations applicable to our products;
- the success of competitive products or technologies;
- introductions and announcements of new products by us, our future commercialization partners, or our competitors, and the timing of these introductions or announcements;
- actions taken by regulatory agencies with respect to our products, clinical trials, manufacturing process or sales and marketing terms;
- actual or anticipated variations in our financial results or those of companies that are perceived to be similar to us;
- the success of our efforts to acquire or in-license additional technologies, products or drug candidates;
- developments concerning any future collaborations, including, but not limited to, those with our sources of manufacturing supply and our commercialization partners;
- market conditions in the pharmaceutical and biotechnology sectors;
- · announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- developments, disputes or litigation matters concerning patents or other intellectual property rights, and our ability to obtain and maintain patent protection for our products;

- · our ability or inability to raise additional capital and the terms on which we raise it;
- the recruitment or departure of key personnel;
- changes in the structure of healthcare payment systems;
- actual or anticipated changes in earnings estimates or changes in stock market analyst recommendations regarding our common stock, other comparable companies or our industry generally;
- · our failure or the failure of our competitors to meet analysts' projections or guidance that we or our competitors may give to the market;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- announcement and expectation of additional financing efforts;
- speculation in the press or investment community;
- trading volume of our common stock;
- · sales of our common stock by us or our stockholders;
- the concentrated ownership of our common stock;
- changes in accounting principles;
- · terrorist acts, acts of war or periods of widespread civil unrest;
- natural disasters and other calamities; and
- · general economic, industry and market conditions.

In addition, the stock markets in general, and the markets for pharmaceutical, biopharmaceutical and biotechnology stocks in particular, have experienced extreme volatility that has been often unrelated to the operating performance of the issuer. These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance.

You will experience immediate and substantial dilution as a result of this offering and may experience additional dilution in the future.

If you purchase common stock in this offering, assuming a public offering price of \$15.00 per share, the midpoint of the range set forth on the cover of this prospectus, you will incur immediate and substantial dilution of \$9.36 per share, representing the difference between the assumed initial public offering price of \$15.00 per share and our pro forma net tangible book value per share as of March 31, 2019 after giving effect to this offering and the conversion of all outstanding shares of our Series A, Series B, Series C and Series C-2 convertible preferred stock into common stock immediately upon the closing of this offering. Moreover, we issued options in the past to acquire common stock and securities convertible into common stock at prices significantly below the assumed initial public offering price. As of March 31, 2019, there were 971,496 shares of our common stock subject to outstanding options. To the extent that any of these outstanding securities are ultimately exercised or settled, you will incur further dilution.

The future issuance of equity or of debt securities that are convertible into equity would dilute our share capital.

We may choose to raise additional capital in the future, depending on market conditions, strategic considerations and operational requirements. To the extent that additional capital is raised through the issuance of shares or other securities convertible into shares, our stockholders will be diluted. Future issuances of our common stock or other equity securities, or the perception that such sales may occur, could adversely affect the trading price of our common stock and impair our ability to raise capital through future offerings of shares or equity securities. No prediction can be made as to the effect, if any, that future sales of common stock or the availability of common stock for future sales will have on the trading price of our common stock.

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for our common stock. The initial public offering price for our common stock will be determined through negotiations with the underwriters. Although we have applied to list our common stock on the Nasdaq Global Market, an active trading market for our shares may never develop or be sustained following this offering. If an active market for our common stock does not develop, it may be difficult for you to sell shares you purchase in this offering without depressing the market price for the shares or at all.

Because our management will have flexibility in allocating the net proceeds from this offering, you may not agree with how we use them and the proceeds may not be invested successfully.

We intend to use the net proceeds from this offering to fund preclinical and clinical development activities for FLX475, RPT193 and an RPT-GCN2i or other future drug candidates, further development of our drug discovery and development engine and additional drug candidates, hiring of additional personnel, capital expenditures, costs of operating as a public company and for other general purposes. We may also use a portion of the net proceeds from this offering to in-license, acquire or invest in complementary businesses, technologies, products or assets. However, we have no current commitments or obligations to do so. Therefore, our management will have flexibility in allocating the net proceeds from this offering. Accordingly, you will be relying on the judgment of our management with regard to the allocation of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being allocated appropriately. It is possible that the proceeds will be invested in a way that does not yield a favorable, or any, return for our company.

If securities or industry analysts do not publish research or reports about our company, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not currently have and may never obtain research coverage by securities and industry analysts. If no or few securities or industry analysts commence coverage of our company, the trading price for our common stock would be negatively impacted. In the event we obtain securities or industry analyst coverage, if any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property rights or our common stock performance, or if our target studies and operating results fail to meet the expectations of the analysts, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

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

Based on the beneficial ownership of our capital stock as of April 8, 2019, our executive officers and directors, together with holders of 5% or more of our capital stock before this offering and their respective

affiliates, will beneficially own approximately 61.3% of our common stock immediately after the closing of this offering without giving effect to any additional purchases by these holders pursuant to their indications of interest to purchase up to approximately \$25.0 million of shares in the offering and assuming no exercise of the underwriters option to purchase additional shares. As a result, these stockholders, if acting together, will continue to have significant influence over the outcome of corporate actions requiring stockholder approval, including the election of directors, any merger, consolidation or sale of all or substantially all of our assets and any other significant corporate transaction.

The interests of these stockholders may not be the same as, and may even conflict with, your interests. For example, these stockholders could delay or prevent a change of control of our company, even if such a change of control would benefit our other stockholders, which could deprive our stockholders of an opportunity to receive a premium for their common stock as part of a sale of our company or our assets and might affect the prevailing market price of our common stock. The significant concentration of stock ownership may adversely affect the trading price of our common stock due to investors' perception that conflicts of interest may exist or arise.

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

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 trading price of our common stock could decline. Based on 828,449 shares of common stock outstanding at March 31, 2019, and after giving effect to the conversion of our outstanding Series A, Series B, Series C and Series C-2 convertible preferred stock, immediately upon the closing of this offering we will have outstanding a total of 17,750,380 shares of common stock. Of these shares, only the shares of common stock sold in this offering by us, 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.

We expect that the lock-up agreements pertaining to this offering will expire after 180 days from the date of this prospectus. BofA Securities, Inc., Wells Fargo Securities, LLC, BMO Capital Markets Corp. and UBS Securities LLC, however, may, in their sole discretion, permit our officers, directors and other stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements. In addition, shares of common stock that are either subject to outstanding options or reserved for future issuance under our 2019 Equity Incentive Plan ("2019 Plan"), 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 trading price of our common stock could decline.

After this offering, the holders of 16,921,931 shares of our common stock issuable upon conversion of our convertible preferred stock at March 31, 2019 will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to the 180-day lock-up agreements described above, as applicable. See "Description of Capital Stock—Registration Rights". 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 held by affiliates, as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our 2019 Equity Incentive Plan, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that significant additional capital may be needed in the future to continue our planned operations, including further development of our drug discovery and development engine, preparing IND filings,

conducting clinical trials, commercialization efforts, expanded research and development activities and costs associated with operating a public company. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to the holders of our common stock, including shares of common stock sold in this offering.

Pursuant to our 2019 Plan, our management is authorized to grant stock options to our employees, directors and consultants. Initially, the aggregate number of shares of our common stock that may be issued pursuant to stock awards under our 2019 Plan is 3,481,819 shares. Additionally, the number of shares of our common stock reserved for issuance under our 2019 Plan will automatically increase on January 1 of each year, beginning on January 1, 2020 and continuing through and including January 1, 2030, by 4% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. Unless our board of directors elects not to increase the number of shares available for future grant each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

We are an "emerging growth company" and our election of reduced reporting requirements applicable to emerging growth companies may make our common stock less attractive to investors.

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act, or 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, or Section 404, reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. In addition, as an emerging growth company, we are only required to provide two years of audited financial statements and two years of selected financial data in this prospectus. We could be an emerging growth company for up to five years following the completion of this offering, although circumstances could cause us to lose that status earlier, including if we are deemed to be a "large accelerated filer," which occurs when the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30, or if we have total annual gross revenue of \$1.07 billion or more during any fiscal year before that time, in which cases we would no longer be an emerging growth company as of the following December 31, or if we issue more than \$1.0 billion in non-convertible debt during any three-year period before that time, in which case we would no longer be an emerging growth company immediately. Even after we no longer qualify as an emerging growth company, we could still qualify as a "smaller reporting company," which would allow us to take advantage of many of the same exemptions from disclosure requirements including not being required to comply with the auditor attestation requirements of Section 404 and reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements. 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 share 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 avail ourselves of an exemption that allows us to delay adopting new or revised accounting standards until such time as those standards apply to private companies. As a result, we will not be subject to the same new or revised accounting standards as other public companies that comply with the public company effective dates, including but not limited to the new lease accounting standard. We have also elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take

advantage of other reduced reporting requirements in future filings. As a result of these elections, the information that we provide to our stockholders may be different than you might receive from other public reporting companies. However, if we later decide to opt out of the extended period for adopting new accounting standards, we would need to disclose such decision and it would be irrevocable.

We will incur 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 and corporate governance practices.

As a public company, and particularly after we are no longer an emerging growth company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the Nasdaq Global Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to attract and retain qualified members of our board of directors. However, these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.

In general, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating loss ("NOL") or tax credits to offset future taxable income. Our existing NOLs or credits may be subject to substantial limitations arising from previous ownership changes, and if we undergo an ownership change our ability to utilize NOLs or credits could be further limited by Section 382 of the Code. In addition, future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Section 382 of the Code. Our NOLs or credits may also be impaired under state law. Accordingly, we may not be able to utilize a material portion of our NOLs or credits. Furthermore, our ability to utilize our NOLs or credits is conditioned upon our attaining profitability and generating U.S. federal and state taxable income. As described above under "—Risks Related to Business," we have incurred significant net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future; thus, we do not know whether or when we will generate the U.S. federal or state taxable income necessary to utilize our NOLs or credits.

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

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

We may incur significant costs from class action litigation due to our expected stock volatility.

Our stock price may fluctuate for many reasons, including as a result of public announcements regarding the progress of our development efforts for our drug discovery and development engine and our drug candidates, the development efforts of future partners or competitors, the addition or departure of our key personnel, variations in our quarterly operating results and changes in market valuations of biopharmaceutical

and biotechnology companies. This risk is especially relevant to us because biopharmaceutical and biotechnology companies have experienced significant stock price volatility in recent years. When the market price of a stock has been volatile as our stock price may be, holders of that stock have occasionally brought securities class action litigation against the company that issued the stock. If any of our stockholders were to bring a lawsuit of this type against us, even if the lawsuit is without merit, we could incur substantial costs defending the lawsuit. The lawsuit could also divert the time and attention of our management.

Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our amended and restated certificate of incorporation and our amended and restated bylaws may delay or prevent an acquisition of our company or a change in our management. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. These provisions include:

- a prohibition on actions by our stockholders by written consent;
- a requirement that special meetings of stockholders, which our company is not obligated to call more than once per calendar year, be called only by the chair of our board of directors, our chief executive officer, or our board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors;
- advance notice requirements for election to our board of directors and for proposing matters that can be acted upon at stockholder meetings;
- division of our board of directors into three classes, serving staggered terms of three years each; and
- the authority of the board of directors to issue preferred stock with such terms as the board of directors may determine.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, as amended, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. These provisions would apply even if the proposed merger or acquisition could be considered beneficial by some stockholders.

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

Our amended and restated certificate of incorporation that will be in effect upon the closing of this offering will provide that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

(1) any derivative action or proceeding brought on our behalf;

- (2) any action asserting a breach of fiduciary duty owed by any of our directors, officers, employees or agents to us or our stockholders;
- (3) any action asserting a claim against us or any of our directors, officers or other employees arising under any provisions of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws; or
- (4) any action asserting a claim against us or any of our directors, officers or other employees governed by the internal affairs doctrine.

These provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act or the rules and regulations thereunder. However, these provisions apply to Securities Act claims and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce a duty or liability created by the Securities Act or the rules and regulations thereunder. Accordingly, there is uncertainty as to whether a court would enforce such provisions, and our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Our amended and restated certificate of incorporation that will be in effect upon the closing of this offering will further provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision.

These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. If a court were to find the exclusive-forum provisions in our amended and restated certificate of incorporation that will be in effect upon the closing of this offering to be inapplicable or unenforceable, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business. For example, the Court of Chancery of the State of Delaware recently determined that a provision stating that U.S. federal district courts are the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act is not enforceable. However, this decision may be reviewed and ultimately overturned by the Delaware Supreme Court. If the Court of Chancery's decision were to be overturned, we would seek to enforce the federal district court exclusive forum provision in our amended and restated certificate of incorporation.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations or financial condition, business strategy and plans and objectives of management for future operations and statements that are necessarily dependent upon future events are forward-looking statements. In some cases, you can identify forward-looking statements because they contain words such as "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "should," "target," "will" or "would" or the negative of these words or other similar terms or expressions. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- estimates of our total addressable market, future revenue, expenses, capital requirements and our needs for additional financing;
- the initiation, cost, timing, progress and results of research and development activities, preclinical or and clinical trials with respect to FLX475, RPT193, our RPT-GCN2i program and potential future drug candidates;
- our ability to identify, develop and commercialize drug candidates;
- our ability to advance FLX475, RPT193 or an RPT-GCN2i or other future drug candidates into, and successfully complete, preclinical studies and clinical or field trials;
- our ability to obtain and maintain regulatory approval of FLX475, RPT193 or an RPT-GCN2i or other future drug candidates, and any
 related restrictions, limitations and/or warnings in the label of an approved drug candidate;
- our ability to develop and expand our drug discovery and development engine;
- our ability to identify drug candidates using our drug discovery and development engine;
- our ability to obtain funding for our operations;
- our ability to obtain and maintain intellectual property protection for our technology and any of our drug candidates;
- our ability to successfully commercialize any of our drug candidates;
- the rate and degree of market acceptance of any of our drug candidates;
- regulatory developments in the United States and international jurisdictions;
- potential liability lawsuits and penalties related to our technology, our drug candidates and our current and future relationships with third parties;
- our ability to attract and retain key scientific and management personnel;
- our ability to effectively manage the growth of our operations;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately under those arrangements;

- our ability to compete effectively with existing competitors and new market entrants;
- our expectations regarding uses of proceeds from this offering;
- potential effects of extensive government regulation;
- our financial performance;
- · our expectation regarding the time during which we will be an emerging growth company under the JOBS Act; and
- the volatility of the trading price of our common stock.

You should not rely on forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this prospectus primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operation, business strategy and financial needs. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties and other factors described in the section titled "Risk Factors" and elsewhere in this prospectus. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on us. The results, events and circumstances reflected in the forward-looking statements may not be achieved or occur, and actual results, events or circumstances could differ materially from those described in the forward-looking statements.

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

The forward-looking statements made in this prospectus relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this prospectus to reflect events or circumstances after the date of this prospectus or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments. We qualify all of our forward-looking statements by these cautionary statements.

MARKET, INDUSTRY AND OTHER DATA

This prospectus contains estimates and information concerning our industry, including market size and growth rates of the markets in which we participate, which are based on industry publications and reports. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to this information.

We have not independently verified the accuracy or completeness of the data contained in industry publications and reports. While we believe that each of these studies and publications is reliable, the industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled "Risk Factors." These and other factors could cause results to differ materially from those expressed in these publications and reports.

USE OF PROCEEDS

We estimate that we will receive net proceeds from this offering of approximately \$66.0 million (or approximately \$76.4 million if the underwriters exercise their over-allotment option in full) based on the assumed initial public offering price of \$15.00 per share of common stock, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$15.00 per share of common stock would increase (decrease) the net proceeds to us from this offering by approximately \$4.7 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 estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares of common stock offered by us would increase (decrease) the net proceeds to us from this offering by approximately \$14.0 million, assuming the assumed initial public offering price of \$15.00 per share of common stock remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to increase our capitalization and financial flexibility and create a public market for our common stock. We currently expect to use the net proceeds from this offering, together with our existing cash and cash equivalents, as follows:

- Approximately \$20.0 million to \$25.0 million to fund the development of FLX475 beyond PoC results from our Phase 1/2 clinical trial;
- Approximately \$20.0 million to \$25.0 million to fund the development of RPT193 beyond our Phase 1 trial in healthy volunteers and patients with AD; and
- The remaining proceeds for continued development of an RPT-GCN2i or other future drug candidate, continued refinement of our proprietary drug discovery and development engine, hiring of additional personnel, capital expenditures, costs of operating as a public company and other general corporate purposes.

We also may use a portion of the net proceeds from this offering to in-license, acquire or invest in complementary businesses, technologies, products or assets. We, however, have no current commitments or obligations to do so.

We cannot specify with certainty all of the particular uses for the remaining net proceeds to us from this offering. The expected net proceeds from this offering, together with our existing cash and cash equivalents will not be sufficient for us to fund any of our drug candidates through regulatory approval, and we will need to raise additional capital to advance the development of our drug candidates. We will have broad discretion over how to use the net proceeds to us from this offering. Pending their use, we intend to invest the net proceeds to us from this offering in board-approved investments including U.S. treasuries, U.S. government agencies, A-1/P-1 commercial paper, bank repurchase agreements, CDs from investment grade banks and money market funds.

DIVIDEND POLICY

We have never declared or paid any dividends on our capital stock. We currently intend to retain all available funds and 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 regarding the declaration and payment of dividends will be at the discretion of our board of directors and will depend on then-existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant. In addition, we may enter into agreements in the future that could contain restrictions on payments of cash dividends.

CAPITALIZATION

The following table sets forth our cash and cash equivalents, and our capitalization as of March 31, 2019 as follows:

- on an actual basis;
- on a pro forma basis, giving effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock as of March 31, 2019 into 16,921,931 shares of common stock immediately prior to the closing of this offering and (ii) the filing and effectiveness of our amended and restated certificate of incorporation that will be in effect upon the closing of this offering; and
- on a pro forma as adjusted basis, giving effect to (i) the pro forma adjustments set forth above and (ii) the issuance and sale of shares of common stock in this offering at the assumed initial public offering price of \$15.00 per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, after deducting estimated the underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma and pro forma as adjusted information below is illustrative only, and our capitalization following the closing of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this information in conjunction with our consolidated financial statements and the related notes included in this prospectus and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Selected Consolidated Financial Data" and other financial information contained in this prospectus.

		As of March 31, 2019				
	Actual Pro Forma		o Forma	Pro Forma as Adjusted(1)		
	(in thousands, except share and					
Cash and cash equivalents	\$ 6	51,758	\$	61,758	\$	127,708
Convertible preferred stock, \$0.0001 par value per share: 104,018,468 shares authorized, actual, no shares pro forma and pro forma as adjusted; 101,531,788 shares issued and outstanding, actual; no shares issued and outstanding, pro forma and pro forma as adjusted	\$ 16	68,058	\$		\$	
Stockholders' deficit:						
Preferred Stock, \$0.0001 par value per share: no shares authorized, issued or outstanding, actual; 50,000,000 shares authorized and no shares issued and outstanding, pro forma and pro forma as adjusted		_		_		_
Common stock, \$0.0001 par value per share: 119,200,000 shares authorized, 828,449 shares issued and outstanding, actual; 500,000,000 shares authorized, 17,750,380 shares issued and outstanding, pro forma; 500,000,000 shares authorized, 22,750,380 shares issued and						
outstanding, pro forma as adjusted		1		2		2
Additional paid-in capital	2	22,884		190,941		256,891
Related party promissory note for the purchase of common stock		(491)		(491)		(491)
Accumulated other comprehensive income		(4)		(4)		(4)
Accumulated deficit	(12	28,141)	(128,141)		(128,141)
Total stockholders' (deficit) equity	(10)5,751)		62,307		128,257
Total capitalization	\$ 6	52,307	\$	62,307	\$	128,257

⁽¹⁾ Each \$1.00 increase (decrease) in the assumed initial public offering price of \$15.00 per share of common stock, the midpoint of the estimated offering price range set forth on the cover page of this prospectus,

would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, total stockholders' (deficit) equity and total capitalization by approximately \$4.7 million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses. Similarly, each increase (decrease) of 1,000,000 shares in the number of shares offered by us at the assumed initial public offering price per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, total stockholders' (deficit) equity and total capitalization by approximately \$14.0 million, assuming the assumed initial public offering price of \$15.00 per share of common stock remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses. The pro forma and pro forma as adjusted information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing.

The outstanding share information in the table above is based on 17,750,380 shares of our common stock (including shares of our convertible preferred stock on an as-converted basis) outstanding as of March 31, 2019, and excludes:

- 545,253 shares of our common stock issuable upon conversion of our Series C-2 convertible preferred stock sold in June 2019;
- 971,496 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock issued under our 2015 Stock Plan ("2015 Plan") and outstanding as of March 31, 2019, with a weighted-average exercise price of \$4.99 per share;
- 130,830 shares of our common stock issuable upon the exercise of stock options granted after March 31, 2019, with an exercise price of \$13.62 per share, and an additional 173,079 shares of our common stock issuable upon the exercise of stock options granted after March 31, 2019, with an exercise price equal to the price per share to the public in this offering;
- 3,481,819 shares of our common stock reserved for future issuance under our 2019 Equity Incentive Plan ("2019 Plan"), (including 617,194 shares of our common stock reserved for issuance as of July 15, 2019, under our 2015 Plan that will be added to our 2019 Plan reserve upon its effectiveness) which includes an annual evergreen increase and will become effective in connection with this offering; and
- 240,336 shares of our common stock reserved for future issuance under our 2019 Employee Stock Purchase Plan ("ESPP"), which includes an annual evergreen increase and will become effective in connection with this offering.

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 and the pro forma as adjusted net tangible book value per share of our common stock immediately after the completion of this offering.

As of March 31, 2019, we had a pro forma net tangible book value of approximately \$62.3 million, or \$3.51 per share. Pro forma net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the number of shares of our common stock outstanding as of March 31, 2019, after giving effect to the automatic conversion of all shares of our convertible preferred stock outstanding as of March 31, 2019 into 16,921,931 shares of our common stock.

After giving further effect to the sale of 5,000,000 shares of common stock that we are offering at the assumed initial public offering price of \$15.00 per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2019 would have been approximately \$128.3 million, or approximately \$5.64 per share. This amount represents an immediate increase in pro forma as adjusted net tangible book value of \$2.13 per share to our existing stockholders and an immediate dilution in pro forma as adjusted net tangible book value per share of approximately \$9.36 per share to new investors purchasing shares of common stock in this offering.

Dilution per share to new investors purchasing our common stock is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors. The following table illustrates this dilution (without giving effect to any exercise by the underwriters of their over-allotment option) on a per share basis:

Assumed initial public offering price per share		\$15.00
Pro forma net tangible book value per share as of March 31, 2019	\$3.51	
Increase in pro forma net tangible book value per share attributable to this offering	2.13	
Pro forma as adjusted net tangible book value per share after this offering		5.64
Dilution in pro forma as adjusted net tangible book value per share to new investors in this offering		\$ 9.36

The dilution information above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$15.00 per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value per share to new investors by approximately \$0.20, and dilution in pro forma as adjusted net tangible book value per share to new investors by approximately \$0.80, assuming that the number of shares of common stock offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses. Each increase (decrease) of 1,000,000 shares in the number of shares of common stock offered by us would increase (decrease) our pro forma as adjusted net tangible book value per share after this offering by approximately \$0.59 per share and decrease (increase) the dilution in pro forma as adjusted net tangible book vale per share to investors participating in this offering by approximately \$0.59 per share, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts, commissions and estimated offering expenses.

If the underwriters exercise their over-allotment option in full, the pro forma as adjusted net tangible book value after the offering would be \$5.90 per share, the increase in pro forma net tangible book value per share to existing stockholders would be \$2.39 per share and the dilution per share to new investors would be \$9.10 per share, in each case assuming an initial public offering price of \$15.00 per share, the midpoint of the estimated offering price set forth on the cover page of this prospectus.

The following table summarizes, on the pro forma as adjusted basis described above, as of March 31, 2019, the differences between the number of shares of common stock purchased from us by our existing stockholders and common stock by new investors purchasing shares in this offering, the total consideration paid to us in cash and the average price per share paid by existing stockholders for shares of common stock issued prior to this offering and the price to be paid by new investors for shares of common stock in this offering. The calculation below is based on the assumed initial public offering price of \$15.00 per share, the midpoint of the estimated offering price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses.

	Shares Purc	hased	Total Consi	Average Price Per		
	Number	Percent	Amount	Percent	Share	
	(in thousands, except share, per share and percentages)					
Existing stockholders	17,750,380	78%	\$168,846	69%	\$ 9.51	
New investors	5,000,000	22	75,000	31	\$ 15.00	
Total	22,750,380	100%	243,846	100%		

The outstanding share information in the table above is based on 17,750,380 shares of our common stock (including shares of our convertible preferred stock on an as-converted basis) outstanding as of March 31, 2019, and excludes:

- 545,253 shares of our common stock issuable upon conversion of our Series C-2 convertible preferred stock sold in June 2019;
- 971,496 shares of our common stock issuable upon the exercise of options to purchase shares of our common stock issued under our 2015 Plan and outstanding as of March 31, 2019, with a weighted-average exercise price of \$4.99 per share;
- 130,830 shares of our common stock issuable upon the exercise of stock options granted after March 31, 2019, with an exercise price of \$13.62 per share, and an additional 173,079 shares of our common stock issuable upon the exercise of stock options granted after March 31, 2019, with an exercise price equal to the price per share to the public in this offering;
- 3,481,819 shares of our common stock reserved for future issuance under our 2019 Plan, (including 617,194 shares of our common stock reserved for issuance as of July 15, 2019, under our 2015 Plan that will be added to our 2019 Plan reserve upon its effectiveness) which includes an annual evergreen increase and will become effective in connection with this offering; and
- 240,336 shares of our common stock reserved for future issuance under our ESPP, which includes an annual evergreen increase and will become effective in connection with this offering.

If the underwriters exercise their over-allotment option in full, our existing stockholders would own 76% and the investors purchasing shares of our common stock in this offering would own 24% of the total number of shares of our common stock outstanding immediately after closing of this offering.

SELECTED CONSOLIDATED FINANCIAL DATA

The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and related notes included elsewhere in this prospectus.

The consolidated statements of operations data for the years ended December 31, 2017 and 2018, and the balance sheet data as of December 31, 2017 and 2018, are derived from our audited consolidated financial statements and related notes included elsewhere in this prospectus. The condensed consolidated statements of operations data for the three months ended March 31, 2018 and 2019 and the condensed consolidated balance sheet data as of March 31, 2019 are derived from our unaudited interim condensed consolidated financial statements and related notes included elsewhere in this prospectus. We have prepared the unaudited interim condensed consolidated financial statements on a basis consistent with our audited consolidated financial statements and, in the opinion of management, such unaudited interim condensed consolidated financial statements reflect all adjustments, consisting only of normal recurring adjustments, that are necessary for the fair presentation of our unaudited interim condensed consolidated financial statements. Our historical results are not necessarily indicative of the results to be expected in the future, and the results for the three months ended March 31, 2019 are not necessarily indicative of the results to be expected for the full year or any other period. The selected financial data in this section are not intended to replace our consolidated financial statements and the related notes and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this prospectus.

		r ended ember 31,	Three months ended March 31,		
	2017	2018 (in thousands, except sha	2018 are and per share dat	2019 (a)	
Consolidated Statements of Operations Data:		` '	•	,	
Operating costs and expenses:					
Research and development	\$ 25,618	\$ 31,767	\$ 7,306	\$ 7,870	
General and administrative	3,713	5,180	1,057	1,674	
Total operating expenses	29,331	36,947	8,363	9,544	
Loss from operations	29,331	36,947	8,363	9,544	
Other (income), net	(216)	(800)	(132)	(356)	
Net loss	\$ 29,115	\$ 36,147	\$ 8,231	\$ 9,188	
Net loss per share, basic and diluted ⁽¹⁾	\$ 67.45	\$ 58.09	\$ 15.10	\$ 13.28	
Weighted average number of shares used in computing net loss per share, basic and diluted	431,679	622,289	545,142	691,834	
Pro forma net loss per share, basic and diluted(1)		\$ 2.50		\$ 0.53	
Weighted average number of shares used in computing pro forma net loss per share, basic and diluted		14,461,086		17,174,802	

⁽¹⁾ See Note 13 to our audited consolidated financial statements and Note 11 to our unaudited interim condensed consolidated financial statements for an explanation of the method used to calculate historical and pro forma basic and diluted net loss per share.

Decem	iber 31,	March 31,
2017	2018	2019
\$ 47,517	\$ 63,798	\$ 61,758
44,994	60,419	59,753
50,391	69,610	67,860
108,643	161,111	168,058
(82,806)	(118,953)	(128,141)
(62,405)	(97,113)	(105,751)
	\$ 47,517 44,994 50,391 108,643 (82,806)	\$ 47,517 \$ 63,798 44,994 60,419 50,391 69,610 108,643 161,111 (82,806) (118,953)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read together with the section titled "Selected Condensed and Consolidated Financial Data" and our condensed and consolidated financial statements and accompanying notes included elsewhere within this prospectus. This discussion includes both historical information and forward-looking statements that involve risk, uncertainties and assumptions. Our actual results may differ materially from management's expectations as a result of various factors, including, but not limited to, those discussed in the section titled "Risk Factors."

Overview

We are a clinical-stage immunology-based biopharmaceutical company focused on discovering, developing and commercializing oral small molecule therapies for patients with significant unmet needs in oncology and inflammatory diseases. Utilizing our proprietary drug discovery and development engine, we are developing highly selective small molecules that are designed to modulate the critical immune responses underlying these diseases. In our first four years since inception, we have discovered and advanced two unique drug candidates each targeting CCR4. Our lead oncology drug candidate, FLX475, reached the clinic in just two and a half years and we expect our lead inflammation drug candidate, RPT193, to enter the clinic in the second half of 2019. We are also pursuing a range of targets, including GCN2 and HPK1, that are in the discovery stage of development.

Our lead oncology drug candidate, FLX475, is designed to selectively inhibit the migration of immunosuppressive T_{reg} into tumors. In a Phase 1 clinical trial in 104 healthy volunteers, FLX475 was well tolerated and demonstrated favorable drug-like properties with a level of target engagement that, in our preclinical studies, corresponded with 90% inhibition of in vitro T_{reg} migration and the highest level of inhibition of in vivo T_{reg} migration and antitumor activity. FLX475 has also demonstrated single agent and combination activity in preclinical tumor models associated with the inhibition of T_{reg} migration into the tumor and an increase in the CD8: T_{reg} ratio. We are currently conducting a Phase 1/2 clinical trial investigating FLX475 as a single agent and in combination with pembrolizumab in patients with "charged" tumors, who we believe have the greatest probability of clinical benefit, in order to study the safety and potential clinical activity of FLX475 in patients with advanced cancer. We anticipate results from the Phase 2 portion of the trial could provide clinical PoC data in the first half of 2020.

Our lead inflammation drug candidate, RPT193, is designed to selectively inhibit the migration of Th2 cells into allergically-inflamed tissues. Th2 cells are clinically validated drivers of allergic diseases along the "atopic march" such as AD, asthma, chronic urticaria (skin rash), allergic conjunctivitis, chronic rhinosinusitis and eosinophilic esophagitis (inflammation of the esophagus). Our preclinical pharmacology and toxicology results for RPT193 showed activity in clinically validated pathways in allergic inflammatory disease models to a degree we believe, if confirmed in clinical trials, would be competitive with currently marketed injectable biologics and show a safety profile that suggests chronic dosing in humans should be well tolerated. We believe the preclinical toxicology and activity results, combined with the convenience of once-daily oral dosing, suggest a profile competitive with standard of care and emerging clinical-stage drug candidates. We expect to initiate a seamless Phase 1 trial of RPT193 comprised initially of Phase 1a single and multiple dose escalation cohorts of healthy volunteers in the second half of 2019, followed by placebo-controlled Phase 1b testing in patients with moderate to severe AD. Our CTA in Europe was accepted in July 2019 and we plan to submit an IND in the United States in the third quarter of 2019 for this Phase 1 trial. We anticipate PoC clinical results from the Phase 1b portion of this study by mid-2020. Thereafter, we intend to expand clinical development into additional Th2-driven allergic indications.

In addition, we are identifying lead compounds that inhibit GCN2, which we believe is a fundamental regulator of antitumor immunity and tumor cell survival. Preclinical studies have demonstrated that an RPT-

GCN2i has the ability to increase in vitro T cell proliferation and function in nutrient-deprived conditions, enhance tumor cell death and elicit antitumor responses in preclinical tumor models. We are developing an RPT-GCN2i with the intent of filing an IND with the FDA in 2020.

We will continue to invest in our proprietary discovery and development engine and investigate several of our identified targets as well as generate additional target and drug candidates, including a future HPK1 drug candidate.

Financial Overview

Since commencing operations in 2015, we have devoted substantially all of our efforts and financial resources to building our research and development capabilities and establishing our corporate infrastructure. As a result, we have incurred net losses since inception. As of March 31, 2019, we had an accumulated deficit of \$128.1 million. We have incurred net losses of \$29.1 million, \$36.1 million, \$8.2 million and \$9.2 million for the years ended December 31, 2017 and 2018, and for the three months ended March 31, 2018 and 2019, respectively. We do not expect to generate product revenue unless and until we obtain approval for the commercialization of a drug candidate, and we cannot assure you that we will ever generate significant revenue or profits.

Since inception, we have financed our operations primarily through the private placements of convertible preferred stock with net proceeds of \$175.6 million, including \$7.5 million raised through the sale of Series C-2 convertible preferred stock in June 2019. As of March 31, 2019, we had cash and cash equivalents of \$61.8 million, and as of June 30, 2019, we had cash and cash equivalents of \$59.9 million, including amounts raised in June 2019. The June 30, 2019 information is preliminary and subject to adjustment and has not been reviewed or audited by our independent registered public accounting firm. We believe that our existing cash and cash equivalents will be sufficient to fund our planned operations for at least the next 12 months from the date of this prospectus without the proceeds from this offering.

We expect to incur substantial expenditures in the foreseeable future as we expand our pipeline and advance our drug candidates through clinical development, undergo the regulatory approval process and, if approved, launch commercial activities. Specifically, in the near term we expect to incur substantial expenses relating to our ongoing and planned clinical trials, the development and validation of our manufacturing processes, and other development activities. Furthermore, upon the completion of this offering, we expect to incur additional costs associated with operating as a public company, including significant legal, accounting, investor relations and other expenses that we did not incur as a private company.

We will need substantial additional funding to support our continuing operations and pursue our development strategy. Until such time as we can generate significant revenue from sales of our drug candidates, if ever, we expect to finance our operations through the sale of equity, debt financings or other capital sources, including potential collaborations with other companies or other strategic transactions. Adequate funding may not be available to us on acceptable terms, or at all. If we fail to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back, or discontinue the development and commercialization of our drug candidates or delay our efforts to expand our product pipeline. We may also be required to sell or license to other parties rights to develop or commercialize our drug candidates that we would prefer to retain.

Clinical Trial Collaboration and Supply Agreement

In November 2018, we entered into a clinical trial collaboration and supply agreement with MSD International GmbH, an affiliate of Merck (known as MSD outside the United States and Canada), under which we will conduct a clinical trial evaluating FLX475 as a monotherapy and in combination with KEYTRUDA® (pembrolizumab), Merck's anti-PD-1 therapy, in patients with advanced cancers. We are the sponsor of the clinical trial and are responsible for the costs of conducting it, and Merck will supply KEYTRUDA® for use in

the clinical trial at no charge to us except that we may be required to reimburse Merck's manufacturing costs upon certain early termination events. Neither party will have any other obligations to reimburse any costs or expenses incurred by the other party. We retain ownership of the quantities of FLX475 used in the clinical trial and we will own the quantities of KEYTRUDA® supplied to us by Merck for use in the clinical trial. The agreement provides for joint ownership of any inventions, clinical data and results generated in the clinical trial that relate to the combined use of the two drugs. Merck will solely own any inventions generated in the clinical trial that relate solely to KEYTRUDA® and all data resulting from testing performed by or on behalf of Merck upon samples collected during the clinical trial. We will solely own any inventions generated in the clinical trial that relate solely to FLX475, clinical data resulting from the use of FLX475 as a monotherapy, and from all data resulting from testing performed by or on behalf of us upon samples collected during the clinical trial. The term of the agreement will continue until delivery of the final report for the clinical trial, provided that either party may terminate the agreement due to the other party's uncured material breach, a violation of anti-corruption obligations, patient safety concerns, regulatory action that prevents supply of such party's compound, or such party's termination of its compound's development or withdrawal of its compound's regulatory approval. Merck may also terminate the agreement if we fail to make any changes to the clinical trial protocol regarding the use of KEYTRUDA® that are reasonably requested by Merck to address any concern raised by Merck that KEYTRUDA® is being used in the clinical trial in an unsafe manner.

Components of Operating Results

Research and Development Expenses

We expense both internal and external research and development expenses to operations as they are incurred. We track the external research and development costs incurred for each of our drug candidates. We do not track our internal research and development costs by drug candidate, as the related efforts and their costs are typically spread across multiple drug candidates.

We account for non-refundable advance payments for goods or services that will be used in future research and development activities as expenses when the goods have been received or when the service has been performed rather than when the payment is made.

Clinical trial costs are a component of research and development expenses. We expense costs for our clinical trial activities performed by third parties, including clinical research organizations ("CROs") and other service providers, as they are incurred, based upon estimates of the work completed over the life of the individual study in accordance with the associated agreements. We use information received from internal personnel and outside service providers to estimate the clinical trial costs incurred.

External research and development expenses consist primarily of costs incurred for the development of our drug candidates and include:

- expenses incurred under agreements with CROs, investigative sites, and consultants to conduct our clinical trials and preclinical and non-clinical studies;
- costs to acquire, develop and manufacture supplies for clinical trials and other studies, including fees paid to contract manufacturing organizations, or CMOs; and
- costs related to compliance with drug development regulatory requirements.

Internal research and development costs include:

 salaries and related costs, including stock-based compensation and travel expenses, for personnel in our research and development functions;

- costs for consultants who advise us on multiple drug candidates; and
- depreciation and other allocated facility-related and overhead expenses.

We expect our research and development expenses to increase substantially during the next few years as we seek to complete existing and initiate additional clinical trials, pursue regulatory approval of FLX475 and RPT193, and advance other programs into the clinic. Over the next few years, we expect our preclinical, clinical, and contract manufacturing expenses to increase significantly relative to what we have incurred to date. Predicting the timing or the final cost to complete our clinical program or validation of our manufacturing and supply processes is difficult and delays may occur because of many factors.

General and Administrative Expenses

General and administrative expenses consist principally of personnel-related costs including payroll and stock-based compensation for personnel in executive, finance, human resources, business and corporate development, and other administrative functions; professional fees for legal, consulting, and accounting services; rent and other facilities costs, depreciation, and other general operating expenses not otherwise classified as research and development expenses.

We anticipate that our general and administrative expenses will increase substantially during the next few years as a result of staff expansion and additional occupancy costs, as well as costs associated with being a public company, including higher professional fees for legal, consulting, and accounting services, investor relations costs, higher insurance premiums and other compliance costs.

Other Income, Net

Other income, net, consists primarily of interest earned on our cash and cash equivalents and also includes interest we earn on promissory notes we executed with our president and chief executive officer and former chief operating officer. The promissory note with our former chief operating officer was extinguished in May 2019, and the promissory note with our president and chief executive officer was forgiven in June 2019. Our cash and cash equivalents are invested in money market funds.

Critical Accounting Policies, Significant Judgments and Use of Estimates

Our consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("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.

While our significant accounting policies are described in the notes to our consolidated financial statements, we believe that the following critical accounting policies are most important to understanding and evaluating our reported financial results.

Research and Development Expenses

Research and development costs are charged to expense as incurred. Research and development costs consist primarily of salaries and benefits of research and development personnel, costs related to research

activities, preclinical studies, clinical trials, drug manufacturing and allocated overhead and facility-related costs. We account for non-refundable advance payments for goods or services that will be used in future research and development activities as expenses when the related goods have been received or when the service has been performed rather than when the payment is made.

Clinical trial costs are a component of research and development expenses. We expense costs for our clinical trial activities performed by third parties, including CROs and other service providers, as they are incurred, based upon estimates of the work completed over the life of the individual study in accordance with associated agreements. We use information we receive from internal personnel and outside service providers to estimate the progress of services performed and the associated clinical trial costs incurred.

Stock-Based Compensation Expense

We account for stock-based compensation arrangements with employees in accordance with ASC 718, *Stock Compensation*. Stock-based awards issued by the Company have been primarily stock options with time-based vesting and performance-based options. ASC 718 requires the recognition of compensation expense, using a fair value-based method, for costs related to all stock-based awards. Our determination of the grant-date fair value of stock options with time-based vesting utilizes the Black-Scholes option-pricing model, and is impacted by the fair value of our common stock as well as other variables including, but not limited to, expected term that options will remain outstanding, expected common stock price volatility over the term of the option awards, risk-free interest rates and expected dividends. There has been no public market for our common stock to date. As such, the estimated fair value of our common stock and underlying stock options has been determined at each grant date by our board of directors, with input from management, based on the information known to us on the grant date and upon a review of any recent events and their potential impact on the estimated per share fair value of our common stock. Our valuations of our common stock were prepared by a third-party valuation firm in accordance with the guidance outlined in the American Institute of Certified Public Accountants Technical Practice Aid, *Valuation of Privately Held Company Equity Securities Issued as Compensation* (the "Practice Aid").

For awards with time-based vesting, stock-based compensation is recognized over the period during which an optionee is required to provide services in exchange for the option award, known as the requisite service period (usually the vesting period) on a straight-line basis. For awards with performance-based vesting, the fair value of the award is recognized as expense when the performance criteria are probable of being achieved, using an accelerated attribution method. In both cases, stock-based compensation expense is recognized based on the fair value determined on the date of grant.

Equity instruments issued to non-employees are accounted for in accordance with ASC 505-50, *Equity Based Payments to Non-Employees*, and are recorded at their fair value on the measurement date and are subject to periodic adjustments as the underlying equity instruments vest. The fair value of options granted to consultants is expensed when vested.

Estimating the fair value of equity-settled awards as of the grant date using the Black-Scholes option pricing model, is affected by assumptions regarding a number of complex variables. Changes in the assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. These inputs are subjective and generally require significant analysis and judgment to develop. These inputs are:

Expected term – The expected term represents the period that our options granted are expected to be outstanding and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term). We have very limited historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for our stock option grants.

Expected volatility – Since we are a privately-held Company and do not have any trading history for our common stock, the expected volatility was estimated based on the average volatility for comparable publicly

traded biopharmaceutical companies over a period, where available, equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, life cycle stage, 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 options.

Expected Dividend – We have never paid dividends on our common stock and has no plans to pay dividends on our common stock. Therefore, we used an expected dividend yield of zero.

We will continue to use judgment in evaluating the expected volatility, expected terms, and interest rates utilized for our stock-based compensation expense calculations on a prospective basis.

Stock-based compensation expense for employees and non-employees is reflected in the consolidated and condensed consolidated statements of operations and comprehensive loss as follows (in thousands):

	Year Ended December 31,		For the Months Marc	Ended
	2017	2018	2018	2019
Research and development	\$ 394	\$ 542	\$ 143	\$ 202
General and administrative	322	628	151	175
Total stock-based compensation expense	\$ 716	\$ 1,170	\$ 294	\$ 377

Common Stock Valuations

The grant date fair value of the Company's common stock has been determined by the Company's Board of Directors with the assistance of management and an independent third-party valuation specialist. The grant date fair value of the Company's common stock was determined using valuation methodologies which utilizes certain assumptions including probability weighting of events, volatility, time to liquidation, a risk-free interest rate and an assumption for a discount for lack of marketability (Level 3 inputs). In determining the fair value of the Company's common stock, the methodologies used to estimate the enterprise value of the Company were performed using methodologies, approaches, and assumptions consistent with the Practice Aid. The methodology to determine the fair value of our common stock included estimating the fair value of the enterprise using a market approach, which estimates the fair value of the Company by including an estimation of the value of the business based on guideline public companies under a number of different scenarios. The assumptions used to determine the estimated fair value of our common stock are based on numerous objective and subjective factors, combined with management judgment, including external market conditions affecting the pharmaceutical and biotechnology industry and trends within the industry; our stage of development; the rights, preferences and privileges of our convertible preferred stock relative to those of our common stock; the prices at which we sold shares of our convertible preferred stock; our financial condition and operating results, including our levels of available capital resources; the progress of our research and development efforts, our stage of development and business strategy; equity market conditions affecting comparable public companies; general U.S. market conditions and the lack of marketability of our common stock.

The Practice Aid identifies various available methods for allocating enterprise value across classes and series of capital stock to determine the estimated fair value of common stock at each valuation date. In accordance with the Practice Aid, we considered the following methods:

• Option Pricing Method. Under the option pricing method ("OPM"), shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the preferred and common stock are inferred by analyzing these options.

• *Probability-Weighted Expected Return Method*. The probability-weighted expected return method ("PWERM") is a scenario-based analysis that estimates value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

Based on our early stage of development and other relevant factors, we determined that an OPM was the most appropriate method for allocating our enterprise value to determine the estimated fair value of our common stock for valuations during 2017 and 2018. For the first quarter of 2019, we used the PWERM method to determine the estimated fair value of our common stock. The PWERM is appropriate for a company expecting a near term liquidity event. In determining the estimated fair value of our common stock, we considered the fact that our stockholders could not freely trade our common stock in the public markets. Accordingly, we applied discounts to reflect the lack of marketability of our common stock based on the weighted-average expected time to liquidity.

Following the completion of this offering, our board of directors intends to determine the fair value of our common stock based on the closing price of our common stock on the date of grant.

Income Taxes

We provide for income taxes under the asset and liability method. Current income tax expense or benefit represents the amount of income taxes expected to be payable or refundable for the current year. Deferred income tax assets and liabilities are determined based on differences between the financial statement reporting and tax bases of assets and liabilities and net operating loss and credit carryforwards, and are measured using the enacted tax rates and laws that will be in effect when such items are expected to reverse. Deferred income tax assets are reduced, as necessary, by a valuation allowance when management determines it is more likely than not that some or all of the tax benefits will not be realized.

We account for uncertain tax positions in accordance with ASC 740-10, *Accounting for Uncertainty in Income Taxes*. We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position's sustainability and is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and we will determine whether (i) the factors underlying the sustainability assertion have changed and (ii) the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

As of December 31, 2018, our total deferred tax assets were \$24.8 million. Due to our lack of earnings history and uncertainties surrounding our ability to generate future taxable income, the net deferred tax assets have been fully offset by a valuation allowance. The deferred tax assets were primarily comprised of federal and state tax net operating losses ("NOLs"). Utilization of NOLs may be limited by the "ownership change" rules, as defined in Section 382 of the Internal Revenue Code. Similar rules may apply under state tax laws. Our ability to use our remaining NOLs may be further limited if we experience an ownership change in connection with this offering, future offerings or as a result of future changes in our stock ownership.

Results of Operations

Comparison of the Years Ended December 31, 2017 and 2018

The following table summarizes our results of operations for the periods indicated (in thousands):

	Year Ended December 31,			
	2017	2018	\$ Change	% Change
Operating expenses:				
Research and development	\$ 25,618	\$ 31,767	\$ 6,149	24%
General and administrative	3,713	5,180	1,467	40
Total operating expenses	29,331	36,947	7,616	26
Loss from operations	29,331	36,947	7,616	26
Other (income):				
Other (income), net	(216)	(800)	(584)	(270)
Net loss	\$ 29,115	\$ 36,147	\$ 7,032	24%

Research and Development Expenses

Research and development expenses increased \$6.1 million, or 24%, from \$25.6 million for the year ended December 31, 2017 to \$31.8 million for the year ended December 31, 2018. The increase in research and development expenses was primarily due to an increase of \$2.4 million in clinical trial expenses to support our lead clinical candidates, an increase of \$1.5 million in outsourced research and development consultants, an increase in laboratory supplies of \$1.4 million to support our preclinical programs and an increase in personnel and other costs of \$0.8 million as a result of an increase in employee headcount.

The following is a comparison of research and development expenses for the years ended December 31, 2017 and 2018 (in thousands):

	Year Ended <u>December 31,</u>		
	2017	2018	
External development expenses:			
FLX475	\$ 2,910	\$ 2,941	
RPT193	_	1,324	
Other Programs	2,596	1,204	
Internal research and development expenses	20,112	26,298	
Total research and development expenses	\$ 25,618	\$ 31,767	

As previously noted, we do not track our own internal research and development costs by drug candidate, as the related efforts and their costs are typically spread across multiple drug candidates.

General and Administrative Expenses

General and administrative expenses increased \$1.5 million, or 40%, from \$3.7 million for the year ended December 31, 2017 to \$5.2 million for the year ended December 31, 2018. The increase in general and administrative expenses was primarily due to an increase of \$0.7 million in personnel costs as a result of an increase in employee headcount, an increase of \$0.4 million in legal and accounting fees, an increase of \$0.2 million in investor relations expense and an increase of \$0.1 million in other administrative expenses to support our infrastructure growth.

Other Income, Net

Other income, net increased \$0.6 million, from \$0.2 million for the year ended December 31, 2017 to \$0.8 million for the year ended December 31, 2018. The increase was due to an increase in interest income of \$0.6 million primarily as a result of a higher average cash and cash equivalents balances in 2018.

Comparison of the Three Months Ended March 31, 2019 and 2018

The following table summarizes our results of operations for the periods indicated (in thousands):

	Three Months Ended March 31,			
	2018	2019	\$ Change	% Change
Operating expenses:				
Research and development	\$7,306	\$ 7,870	\$ 564	8%
General and administrative	1,057	1,674	617	58
Total operating expenses	8,363	9,544	1,181	14
Loss from operations	8,363	9,544	1,181	14
Other (income)				
Other (income), net	(132)	(356)	(224)	170
Net loss	\$8,231	\$ 9,188	\$ 957	12%

Research and development expenses increased \$0.6 million, or 8%, from \$7.3 million for the three months ended March 31, 2018 to \$7.9 million for the three months ended March 31, 2019. The increase in research and development expenses was primarily due to an increase in toxicology and drug substance expenses of \$0.6 million as we prepared our lead drug candidates for clinical trials, an increase of \$0.2 million in personnel and outsourced research and development consultants costs as we increased our headcount, an increase of \$0.2 million in other research expenses, partially offset by a reduction in expenditures of \$0.4 million of laboratory supplies.

The following is a comparison of research and development expenses for the three months ended March 31, 2018 and 2019 (in thousands):

		Three Months Ended March 31,	
	2018	2019	
External development expenses:			
FLX475	\$ 664	\$ 1,308	
RPT193	1	836	
Other Programs	46	75	
Internal research and development expenses	6,595	5,651	
Total research and development expenses	\$ 7,306	\$ 7,870	

As previously noted, we do not track our own internal research and development costs by drug candidate, as the related efforts and their costs are typically spread across multiple drug candidates.

General and Administrative Expenses

General and administrative expenses increased \$0.6 million, or 58%, from \$1.1 million for the three months ended March 31, 2018 to \$1.7 million for the three months ended March 31, 2019. The increase in

general and administrative expenses was primarily due to an increase of \$0.2 million in personnel and consulting costs as a result of an increase in headcount, an increase of \$0.2 million in legal and accounting fees, and an increase of \$0.2 million in other administrative expenses to support our infrastructure growth.

Other Income, Net

Other income, net increased \$0.2 million from \$0.1 million for the three months ended March 31, 2018 to \$0.4 million for the three months ended March 31, 2019. The increase was as a result of a higher average cash and cash equivalents balances in 2019.

Liquidity and Capital Resources; Plan of Operations

As of March 31, 2019, we had cash and cash equivalents of \$61.8 million and as of June 30, 2019, we had cash and cash equivalents of \$59.9 million, including \$7.5 million in net proceeds raised through private placement of Series C-2 convertible preferred stock in June 2019. The June 30, 2019 information is preliminary and subject to adjustment. Our cash equivalents are held in money market funds. Since inception, we have incurred net losses and negative cash flows from operations. At March 31, 2019, we had an accumulated deficit of \$128.1 million. The promissory note with our former chief operating officer was extinguished in May 2019 and the promissory note with our president and chief executive officer was forgiven in June 2019.

We have historically financed our operations primarily through the sale of convertible preferred stock. We believe that our existing cash and cash equivalents will be sufficient to fund our planned operations for the next 12 months from the date of this prospectus without the proceeds from this offering. Management expects operating losses to continue for the foreseeable future. As we continue to incur losses, a transition to profitability is dependent upon the successful development, approval and commercialization of our drug candidates and the achievement of a level of revenues adequate to support our cost structure. We will continue to require additional capital to develop our drug candidates and fund operations for the foreseeable future. We may seek to raise capital through private or public equity or debt financings, collaborative or other arrangements with other companies, or through other sources of financing. Adequate additional funding may not be available to us on acceptable terms, or at all.

Our failure to raise capital as and when needed could have a negative impact on our financial condition and our ability to pursue our business strategies. We anticipate that we will need to raise substantial additional capital, the requirements of which will depend on many factors, including:

- the scope, rate of progress and costs of our drug discovery, preclinical development activities, laboratory testing and clinical trials for our drug candidates;
- the number and scope of clinical programs we decide to pursue;
- the scope and costs of manufacturing development and commercial manufacturing activities;
- · the extent to which we acquire or in-license other drug candidates and technologies;
- the cost, timing and outcome of regulatory review of our drug candidates;
- the cost and timing of establishing sales and marketing capabilities, if any of our drug candidates receive marketing approval;
- the costs of preparing, filing and prosecuting patent applications, obtaining, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;
- our ability to establish and maintain collaborations on favorable terms, if at all;

- our efforts to enhance operational systems and our ability to attract, hire and retain qualified personnel, including personnel to support the development of our drug candidates;
- · the costs associated with being a public company; and
- the cost associated with commercializing our drug candidates, if they receive marketing approval.

If we raise additional funds by issuing equity securities, our stockholders may experience dilution. Any future debt financing into which we enter may impose upon us additional covenants that restrict our operations, including limitations on our ability to incur liens or additional debt, pay dividends, repurchase our common stock, make certain investments and engage in certain merger, consolidation or asset sale transactions. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. If we are unable to raise additional funds when needed, we may be required to delay, reduce, or terminate some or all of our development programs and clinical trials. We may also be required to sell or license to other parties rights to develop or commercialize our drug candidates that we would prefer to retain.

See "Risk Factors" for additional risks associated with our substantial capital requirements.

Summary Consolidated Statement of Cash Flows

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

	Year Ended I	Year Ended December 31,		ths Ended h 31,
	2017	2018	2018	2019
Net cash (used in) provided by:				
Operating activities	\$ (27,123)	\$ (32,953)	\$ (7,617)	\$ (8,634)
Investing activities	(1,124)	(3,500)	(437)	(419)
Financing activities	30,102	52,734	87	7,013
Net increase (decrease) in cash and cash equivalents	\$ 1,855	\$ 16,281	\$ (7,967)	\$ (2,040)

Cash Used in Operating Activities

Net cash used in operating activities was \$27.1 million for the year ended December 31, 2017, reflecting a net loss of \$29.1 million, net changes in operating assets and liabilities of \$0.1 million, partially offset by non-cash charges for depreciation, amortization and stock-based compensation expense of \$2.1 million. Net cash used in operating activities was \$33.0 million for the year ended December 31, 2018, reflecting a net loss of \$36.1 million, partially offset by non-cash charges for depreciation, amortization and stock-based compensation expense of \$2.4 million, and net decreases in operating assets and liabilities of \$0.7 million.

Net cash used in operating activities was \$7.6 million for the three months ended March 31, 2018, reflecting a net loss of \$8.2 million, partially offset by non-cash charges for depreciation, amortization and stock-based compensation expense of \$0.6 million. Net cash used in operating activities was \$8.6 million for the three months ended March 31, 2019, reflecting a net loss of \$9.2 million, partially offset by non-cash charges for depreciation, amortization and stock-based compensation expense of \$0.7 million and net increases in operating assets and liabilities of \$0.1 million.

Cash Used in Investing Activities

Cash used in investing activities was \$1.1 million and \$3.5 million for years ended December 31, 2017 and 2018, respectively, and primarily resulted from the purchase of laboratory equipment and leasehold improvements.

Cash used in investing activities was \$0.4 million and \$0.4 million for the three months ended March 31, 2018 and 2019, respectively, and primarily resulted from the purchase of laboratory equipment and leasehold improvements.

Cash Provided by Financing Activities

Net cash provided by financing activities was \$30.1 million and \$52.7 million for the years ended December 31, 2017 and 2018, respectively, resulting from the receipt of net proceeds from the issuance of our convertible preferred stock.

Net cash provided by financing activities was \$0.1 million for the three months ended March 31, 2018 resulting from proceeds received from stock options exercises. Net cash provided by financing activities was \$7.0 million for the three months ended March 31, 2019 resulting from net proceeds from the issuance of our convertible preferred stock.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as of March 31, 2019 (in thousands):

		Payment due by Period			
	Less than	Less than			
	1 year	2-3	4 to 5	After 5	Total
Operating Lease obligations	\$ 1,411	\$3,716	\$ 4,183	\$6,035	\$15,345

As of March 31, 2019, our commitments consisted of operating leases for our operating facilities for approximately 36,754 square feet. Under the terms of the agreements, we will have lease obligations, net of sublease income, consisting of \$15.3 million in payments from 2019 through 2026.

We enter into contracts in the normal course of business with third-party contract organizations for clinical trials, non-clinical studies and testing, and other services and products for operating purposes. These contracts generally provide for termination following a certain period after notice, and therefore we believe that our non-cancelable obligations under these agreements are not material and they are not included in the table above.

Off-Balance Sheet Arrangements

Since our inception, we have not engaged in any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Indemnification

As permitted under Delaware law and in accordance with our bylaws, we indemnify our officers and directors for certain events or occurrences while the officer or director is or was serving in such capacity. We are also party to indemnification agreements with our officers and directors. We believe the fair value of the indemnification rights and agreements is minimal. Accordingly, we have not recorded any liabilities for these indemnification rights and agreements as of December 31, 2017 and December 31, 2018.

JOBS Act Accounting Election

The Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), permits an "emerging growth company" such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We are choosing to elect the extended transition period for

complying with new or revised accounting standards pursuant to Section 107(b) of the JOBS Act until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

We elected to use this extended transition period for complying with new or revised accounting standards, including but not limited to the new lease accounting standard, that have different effective dates for public and private companies until the earlier of the date that we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, these financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates. We early adopted Accounting Standards Update 2014-09, *Revenue from Contracts with Customers* (Accounting Standards Codification Topic 606), and Accounting Standards Update 2018-07, *Improvements to Nonemployee Share-Based Payment Accounting* (Accounting Standards Codification Topic 718), as the JOBS Act does not preclude an emerging growth company from early adopting a new or revised accounting standard earlier than the time that such standard applies to private companies. We expect 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.

We will remain an emerging growth company until the earliest of (1) the last day of our first 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 (ii) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700.0 million of the prior June 30th and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period.

Recent Adopted Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* (Topic 606), which supersedes the revenue recognition requirements in ASC 605, Revenue Recognition. This standard is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard 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. The standard is effective for annual periods beginning after December 15, 2018 using one of two retrospective application methods. Early adoption is permitted, but not before annual periods beginning after December 15, 2016. We have elected to adopt this standard as of January 1, 2018. The adoption of ASU No. 2014-09 did not have any impact on our consolidated financial statements and related disclosures.

In August 2018, the SEC issued a final rule to simplify certain disclosure requirements. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. In August and September 2018, further amendments were issued to provide implementation guidance on adoption of the SEC rule and transition guidance for the new interim stockholders' equity disclosure. We adopted these requirements in the first quarter of 2019.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation—Stock Compensation* (Topic 718), Scope of Modification Accounting. This pronouncement provides guidance about which changes to the terms or conditions of a share-based payment award may require an entity to apply modification accounting under Topic 718. This guidance is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, with early adoption permitted. We adopted this standard on January 1, 2018. The adoption of ASU No. 2017-09 did not have a significant impact on our consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230), which provides greater clarity to preparers on the treatment of certain items within an entity's statement of cash flows. The new guidance is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. The guidance becomes effective on January 1, 2019 and early adoption is permitted. We adopted this standard on January 1, 2019. The adoption of ASU No. 2016-15 did not have a significant impact on our interim condensed consolidated financial statements and related disclosures.

Recent Accounting Pronouncements Not Yet Adopted

Under the JOBS Act, we meet the definition of an emerging growth company, and have elected the extended transition period for complying with new or revised accounting standards pursuant to Section 107(b) of the JOBS Act.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurements (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement* as part of the FASB's disclosure framework project. This ASU modifies the disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement by removing the requirement to disclose amounts of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, the policy for timing of transfers between levels, and the valuation process for Level 3 fair value measurements. This ASU also modifies existing disclosure requirements by clarifying that the measurement uncertainty disclosure is to communicate information about the uncertainty in measurement as of the reporting date, and it adds required disclosures for the changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period, and the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. This ASU will be effective for the Company for fiscal years and interim periods within those fiscal years, beginning after December 15, 2019. We are currently assessing the impact of this ASU on our consolidated financial statements.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation—Stock Compensation (Topic 718): Improvements to Non-Employee Share-Based Payment Accounting* as part of the FASB simplification initiative. The new standard expands the scope of Topic 718, allowing us to apply the requirements of Topic 718 to certain non-employee awards to acquire goods and services from non-employees. This ASU will be effective for the Company for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020, with early adoption permitted. We are currently assessing the timing of adoption and the impact that the adoption of ASU 2018-07 will have on our consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*. ASU 2016-02 requires lessees to put most leases on their balance sheet while recognizing expense in a manner similar to existing accounting. ASU 2016-02 states that a lessee would recognize a lease liability for the obligation to make lease payments and a right-to-use asset for the right to use the underlying asset for the lease term. The new accounting guidance is effective for fiscal periods beginning after December 15, 2019 and early adoption is permitted. The Company plans to adopt this standard on January 1, 2020 and is currently evaluating the impact that the adoption of ASU 2016-02 will have on our consolidated financial statements and related disclosures.

Quantitative and Qualitative Disclosures about Market Risk

The market risk inherent in our financial instruments and in our financial position represents the potential loss arising from adverse changes in interest rates or exchange rates. As of March 31, 2019, we had cash and cash equivalents of \$61.8 million, consisting of interest-bearing money market accounts for which the fair market value would be affected by changes in the general level of United States interest rates. However, due to the short-term maturities and the low-risk profile of our investments, an immediate 10% change in interest rates would not have a material effect on the fair market value of our cash, cash equivalents and investments.

We do not believe that inflation, interest rate changes, or exchange rate fluctuations had a significant impact on our results of operations for any periods presented herein.

BUSINESS

Overview

We are a clinical-stage immunology-based biopharmaceutical company focused on discovering, developing and commercializing oral small molecule therapies for patients with significant unmet needs in oncology and inflammatory diseases. Utilizing our proprietary drug discovery and development engine, we are developing highly selective small molecules designed to modulate the critical immune responses underlying these diseases. In our first four years since inception, we have discovered and advanced two unique drug candidates each targeting C-C motif chemokine receptor 4 ("CCR4"). Our lead oncology drug candidate, FLX475, reached the clinic in just two and a half years and we expect our lead inflammation drug candidate, RPT193, to enter the clinic in the second half of 2019. We are also pursuing a range of targets, including general control nonderepressible 2 ("GCN2") and hematopoietic progenitor kinase 1 ("HPK1"), that are in the discovery stage of development.

Our lead oncology drug candidate, FLX475, is designed to selectively inhibit the migration of immunosuppressive regulatory T cells (" T_{reg} ") into tumors. In a Phase 1 clinical trial in 104 healthy volunteers, FLX475 was well tolerated and demonstrated favorable drug-like properties with a level of target engagement that, in our preclinical studies, corresponded with 90% inhibition of in vitro T_{reg} migration and the highest level of inhibition of in vivo T_{reg} migration and antitumor activity. FLX475 has also demonstrated single agent and combination activity in preclinical tumor models associated with the inhibition of T_{reg} migration into the tumor and an increase in the CD8: T_{reg} ratio. We are currently conducting a Phase 1/2 clinical trial investigating FLX475 as a single agent and in combination with pembrolizumab (marketed as Keytruda) in patients with "charged" tumors who we believe have the greatest probability of clinical benefit, in order to study the safety and potential clinical activity of FLX475 in patients with advanced cancer. We anticipate results from the Phase 2 portion of the trial could provide clinical proof-of-concept ("PoC") data in the first half of 2020.

Our lead inflammation drug candidate, RPT193, is designed to selectively inhibit the migration of type 2 T helper cells ("Th2 cells"), into allergically-inflamed tissues. Th2 cells are clinically validated drivers of allergic diseases along the "atopic march" such as atopic dermatitis ("AD"), asthma, chronic urticaria (skin rash), allergic conjunctivitis, chronic rhinosinusitis and eosinophilic esophagitis (inflammation of the esophagus). Our preclinical pharmacology and toxicology results for RPT193 showed activity in clinically validated pathways in allergic inflammatory disease models to a degree we believe, if confirmed in clinical trials, would be competitive with currently marketed injectable biologics and show a safety profile that suggests chronic dosing in humans should be well tolerated. We believe the preclinical toxicology and activity results, combined with the convenience of once-daily oral dosing, suggest a profile competitive with standard of care and emerging clinical-stage drug candidates. We expect to initiate a seamless Phase 1 trial of RPT193 comprised initially of Phase 1a single and multiple dose escalation cohorts of healthy volunteers in the second half of 2019, followed by placebo-controlled Phase 1b testing in patients with moderate to severe AD. Our Clinical Trial Application ("CTA") in Europe was accepted in July 2019 and we plan to submit an Investigational New Drug application ("IND") in the United States in the third quarter of 2019 for this Phase 1 trial. We anticipate PoC clinical results from the Phase 1b portion of this study by mid-2020. Thereafter, we intend to expand clinical development into additional Th2-driven allergic indications.

In addition, we are identifying lead compounds that inhibit GCN2, which we believe is a fundamental regulator of antitumor immunity and tumor cell survival. Preclinical studies have demonstrated that a potential inhibitor of GCN2 (an "RPT-GCN2i"), has the ability to restore in vitro T cell proliferation and function in nutrient-deprived conditions, enhance tumor cell death and elicit antitumor responses in preclinical tumor models. We are developing an RPT-GCN2i with the intent of filing an IND with the FDA in 2020.

We will continue to invest in our proprietary discovery and development engine and investigate several of our identified targets as well as generate additional target and drug candidates, including a future HPK1 drug candidate.

We internally discovered and designed all of our drug candidates. We hold worldwide rights to each of our drug candidates.

Our Pipeline: Highly Selective Oral Compounds Targeting Critical Immune Drivers

PR	OGRAM	DISCOVERY	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	Anticipated Program Milestone
CCR4 Program	FLX475 Cancer		Monotherapy - selected tumor types* tion with Keytruda (PD-1) - selected tumor types*				PoC: 1H 2020
CCR4 P	RPT193 Inflammation	Alopic Dermatitis** Asthma and Other Allergic Diseases**					PoC: Mid-2020
RP	T-GCN2I	Solid Tumors					IND Filing: 2020
НР	K1	Solid Turnors					

- IND submitted in May 2018 to treat multiple "charged" tumor types including non-small cell lung cancer, triple negative breast cancer, head and neck squamous cell carcinoma, nasopharyngeal cancer, gastric cancer, certain Hodgkin and non-Hodgkin lymphomas and cervical cancer.

 Initial Phase 1 study in healthy volunteers and patients with atopic dermatitis estimated to start in 2H 2019. Our CTA in Europe was accepted in July 2019. Subsequent Phase 2 studies may include additional allergic accesses beyond atopic dermatitis, including asthma, chronic urticaria (skin rash), allergic conjunctivitis, chronic rhinosinusitis and eosinophilic esophagitis (inflammation of the esophagus).

Key Upcoming Milestones

Timi	ina	Milestones				
	8	FLX475	RPT193	RPT-GCN2i		
	1H Phase 1 dose escalation (monotherapy & combo) CTA filing		CTA filing			
2019 2H		Phase 2 (Stage 1) enrollment	CTA accepted July 2019; Phase 1a first-in-human study			
2020	1H	Phase 2 clinical PoC	Phase 1b clinical PoC in AD	Candidate selection		
2020	2H	Follow-on studies and potential registrational studies	Initiate Phase 2 in AD & additional indications	IND filing		

Our CCR4 Franchise

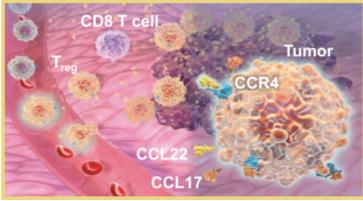
Our proprietary drug discovery and development engine has identified the cell surface receptor CCR4 as a drug target that potentially has broad applicability in oncology and inflammatory diseases. Receptors such as CCR4 bind to chemoattractant molecules called chemokines that orchestrate migration and homing of immune cells to specific tissues throughout the body. Chemokines specific for CCR4 are secreted from tumors and from

allergically-inflamed tissues, but are not highly expressed in healthy tissues. Our approach is designed to enable selective restoration of the immune response within the tumor and allergically-inflamed tissues without systemically depleting immune cells and broadly suppressing the immune system. Each of our two unique drug candidates, FLX475 and RPT193, target CCR4 in a manner we believe is well suited for cancer and inflammatory disease, respectively.

CCR4 Antagonist for Oncology: FLX475

We are developing FLX475 for the treatment of a broad range of "charged" tumors, which represent cancer types we believe are most likely to respond to FLX475. In cancer, the secretion of certain chemokines from tumor cells and tumor-resident immune cells is responsible for recruitment of immunosuppressive T_{reg} to tumor sites. T_{reg} represent a dominant pathway for downregulating the immune response, and thus may limit the effectiveness of currently available therapies such as checkpoint inhibitors. Therefore, blocking the migration of T_{reg} has the potential to restore naturally-occurring antitumor immunity as well as to synergize with a variety of both conventional and immune-based therapies, such as radiation, chemotherapy, checkpoint inhibitors, immune stimulators and adoptive T cell therapy. We believe that the inhibition of CCR4 has the potential to bring therapeutic benefit to patients across a wide spectrum of tumors in a manner similar to other immuno-oncology therapies that have been shown to be effective against multiple tumor types, while also potentially deepening or broadening clinical responses to these therapies.

FLX475: Highly Selective Approach for Targeting Tumor T_{reg}



Our proprietary drug discovery and development engine has identified certain tumors in which the abundance of T_{reg} is likely to be a cause of immune suppression. We refer to these tumors as "charged," as defined by their expression of high levels of (i) CCR4 ligands, (ii) T_{reg} and (iii) CD8+ effector cells. These "charged" tumors include tumor types such as non-small cell lung cancer ("NSCLC"), triple negative breast cancer ("TNBC"), head and neck squamous cell carcinoma ("HNSCC"), nasopharyngeal cancer ("NPC"), gastric cancer, certain Hodgkin ("HL") and non-Hodgkin lymphomas ("NHL"), and cervical cancer. Additionally, we have discovered that the presence of oncogenic viruses, such as Epstein-Barr virus ("EBV") and human papillomavirus ("HPV"), is associated with tumors that are highly "charged" and allows prospective patient selection.

FLX475 is a small molecule CCR4 antagonist that is designed to block the migration of T_{reg} specifically into tumors, but not healthy tissues, without depleting T_{reg} throughout the body, which we believe may decrease the likelihood of side effects. In preclinical tumor models, FLX475 appears to selectively bind to CCR4 and inhibit the migration of T_{reg} into tumors without affecting healthy tissue such as skin, blood or lymphoid organs, increase the number of CD8+ effector T cells in the tumor and, as a single agent or in combination with checkpoint inhibitors, lead to tumor reduction or eradication. In addition, in preclinical tumor models, inhibition of CCR4 with FLX475 did not appear to negatively impact effector immune cells.

We have completed a placebo-controlled, double-blinded dose-escalating Phase 1 clinical trial of FLX475 in 104 healthy volunteers. The objectives of the trial were to evaluate the safety and tolerability, pharmacokinetics, and pharmacodynamics of single and repeat doses of FLX475 in human subjects. FLX475 was well tolerated and demonstrated dose-dependent inhibition of CCR4 with no observed immune-related adverse events or significant clinical adverse events. Daily dosing within the single dose arm ranged between 5 mg and 1,000 mg and in the multiple dose arm between 25 mg and 150 mg a day for 14 days. At the 75 mg daily dose, FLX475 exceeded the targeted receptor occupancy in six out of six healthy volunteers, which, in our preclinical studies, corresponded with a 90% inhibition of in vitro T_{reg} migration and the highest level of inhibition of in vivo T_{reg} migration and antitumor activity. We are currently enrolling a Phase 1/2 trial of FLX475 as a monotherapy, and in combination with pembrolizumab, in patients with "charged" tumors and anticipate results from the Phase 2 portion of the trial could provide clinical PoC data in the first half of 2020.

We hold worldwide rights to FLX475 and own an issued U.S. composition of matter patent with respect to FLX475 that is scheduled to expire in 2037.

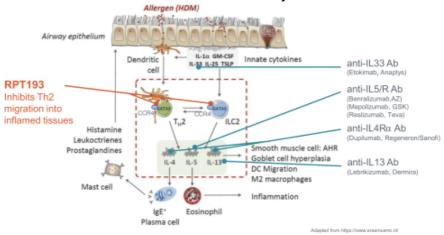
CCR4 Antagonist for Allergic Inflammatory Disease: RPT193

RPT193 is a small molecule CCR4 antagonist that blocks the recruitment of inflammatory immune cells, known as Th2 cells, which are clinically implicated in allergic inflammatory diseases. We are developing RPT193 for the treatment of a broad range of allergic inflammatory diseases, the first of which is AD, a chronic, inflammatory skin disease characterized by skin barrier disruption and immune dysregulation. We intend to initiate a seamless first in human trial in 2019 starting with Phase 1a single and multiple dose escalation cohorts in healthy volunteers followed by placebo-controlled Phase 1b testing in patients with moderate to severe AD. Our CTA in Europe was accepted in July 2019 and we plan to submit an IND in the United States in the third quarter of 2019 for this Phase 1 trial. We anticipate PoC clinical results from the Phase 1b portion of this study by mid-2020.

While there are marketed injectable products for the treatment of AD, as well as oral and injectable drug candidates in development, we believe there is an unmet need for a safe and effective oral treatment. Our preclinical pharmacology and toxicology results for RPT193 showed activity in clinically validated pathways in allergic inflammatory disease models to a degree we believe, if confirmed in clinical trials, would be competitive with currently marketed injectable biologics and show a safety profile that suggests chronic dosing in humans should be well tolerated. We believe the preclinical toxicology and activity results for RPT193, combined with the convenience of once-daily oral dosing, suggest a profile competitive with standard of care and emerging clinical-stage drug candidates.

CCR4 is highly expressed on Th2 cells. In allergic inflammatory diseases, including AD, chemokines recruit Th2 cells via CCR4 into inflamed tissues. Once Th2 cells enter tissues such as the skin or the airways in the lung, they secrete proteins known to drive the inflammatory response. The role of Th2 cells has been clinically validated by, among others, dupilumab, an injectable biologic targeting this pathway. Further evidence of CCR4's role in AD includes the observation of higher levels of CCR4 ligands in AD patients compared with healthy humans; these ligands also correlate with the severity of disease. We believe that by inhibiting CCR4, RPT193 has the potential to bring therapeutic benefit to patients across a broad spectrum of additional allergic inflammatory diseases, including asthma, chronic urticaria, allergic conjunctivitis, chronic rhinosinusitis and eosinophilic esophagitis.

RPT193 Acts on a Well-Validated Pathway in AD and Asthma



We are developing RPT193 initially in AD because there is:

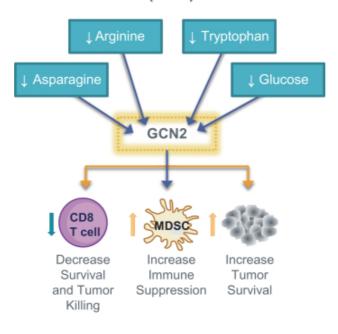
- an unmet need for a safe and effective oral treatment;
- a potentially efficient path to PoC, due to high prevalence of disease and short time to clinically relevant endpoints;
- a well-defined set of clinical endpoints that have historically been accepted for regulatory approval, which are usable for PoC as well as
 for subsequent pivotal studies;
- · easy access to patient samples, such as skin biopsies, to interrogate mechanisms of action and clinical biomarkers of efficacy; and
- a precedent that PoC in AD has translated to other Th2-driven allergic inflammatory diseases.

We hold worldwide rights to RPT193 and have pending patent applications with respect to RPT193 that, if issued, would be scheduled to expire in 2039.

GCN2 and HPK1 for Oncology

GCN2 is a fundamental driver of immune suppression and the survival of tumor cells under the conditions of metabolic stress typically seen in the tumor microenvironment ("TME"). Preclinical studies have shown that the inhibition of GCN2 can result in tumor cell death in vitro and restoration of immune function under these stress conditions. The GCN2 pathway is generally not active in healthy tissue suggesting the potential for a favorable therapeutic index for drugs targeting GCN2. Preclinical in vitro and in vivo studies have demonstrated that an RPT-GCN2i has the ability to increase T cell proliferation and function in nutrient-deprived conditions, to overcome immune suppression induced by myeloid-derived suppressor cells ("MDSC"), and to elicit antitumor responses in animal models. We are developing an RPT-GCN2i with the intent of filing an IND with the FDA in 2020.

GCN2: Key Driver of Immunosuppression in the TME Tumor Microenvironment (TME)



Mellor and Munn, 2008; Ye et al, 2010; Wang et al, 2013

HPK1 is a negative regulator of T cell activation, and the inhibition of HPK1 has the potential to enhance T cell function and antitumor activity.

Our Proprietary Drug Discovery and Development Engine

Through our team's deep expertise in immunology and drug discovery, supported by advanced computational biology, we are developing the ability to exploit difficult targets, including through proprietary know-how. We refer to this as our "proprietary drug discovery and development engine." This engine is built upon the following four key pillars:

- computationally-driven disease target and biomarker identification;
- · efficient design of small molecule drug properties;
- · data-driven patient selection; and
- · nimble clinical execution.

We believe that the drug candidates generated from this engine, if approved, will significantly improve the treatment paradigms and outcomes for patients by fundamentally modulating the immune responses in a range of cancers and inflammatory diseases.

Our Team and Investors

Our management and scientific teams and scientific advisory board have substantial expertise in three areas key to our success: immunology, small molecule drug discovery and development and computational biology. Collectively, our executives have contributed to the research and development of multiple approved drugs, including Gazyva, Venclexta, Tavalisse, Actemra, Provenge and Xgeva.

We have assembled a leadership team and advisory group with a proven track record of success, and a team of scientists with substantial knowledge and expertise especially in human immune biology and also in the drug discovery and development and translational areas essential to execute on this approach. Our President and Chief Executive Officer, Brian Wong, M.D., Ph.D., previously served as Senior Vice President, Research, and Head of Immuno-Oncology at Five Prime Therapeutics and Director of Research in the Inflammation Disease Biology Area at Roche. William Ho, M.D., Ph.D., our Chief Medical Officer, previously led clinical development at Igenica Biotherapeutics and the development of multiple products at Genentech including Gazyva and Venclexta. Our Chief Scientific Officer, Dirk Brockstedt, Ph.D., previously served as Executive Vice President of Research and Development at Aduro Biotech. Our Vice President, Quantitative and Computational Biology, Paul Kassner, Ph.D., previously served as Director of Research and Head of the Genome Analysis Unit at Amgen. Before joining RAPT, our Senior Vice President of Drug Discovery and Preclinical Development, David Wustrow, Ph.D., most recently served as Vice President, Chemical and Pharmaceutical Sciences at Cleave Biosciences. Our Vice President, Finance and Corporate Controller, Karen C. Lam, previously served as Senior Director, Controller of True North Therapeutics and Director, Controller at iPierian and Ms. Lam is a Certified Public Accountant (inactive). Our Vice President, Human Resources, Erin Campany, previously served as Head of Human Resources at Immune Design and Senior Director, Global Human Resources at Acorda Therapeutics.

Our management team is supported by a scientific advisory board comprised of leading clinicians and scientific researchers, including Alexander Rudensky, Ph.D. (Memorial Sloan Kettering Cancer Center); Antoni Ribas, M.D., Ph.D. (UCLA); Scott Antonia, M.D., Ph.D. (Duke University); Drew Pardoll, M.D., Ph.D. (Johns Hopkins University); Philip Greenberg, M.D., Ph.D. (Fred Hutchinson Cancer Research Center); Robert Zamboni, Ph.D. (McGill University); Emma Guttman-Yassky, M.D., Ph.D. (Mt. Sinai); and David Goeddel, Ph.D. (The Column Group). Our clinical advisors also include Jasmina Jankicevic, M.D. (Premier Research); Thomas Bieber, M.D. (University of Bonn, Germany); and Andrew Blauvelt, M.D., M.B.A. (Oregon Medical Research Center).

We are backed by leading corporate and institutional investors, including The Column Group, GV, Kleiner Perkins, Topspin Partners and Celgene Corporation.

Our Strategy

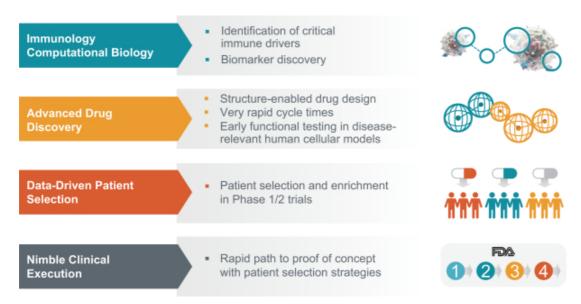
- Advance our lead candidate, FLX475, through clinical development to commercialization in "charged" tumor types, which represent cancer types we believe are most likely to respond to FLX475. We expect to rapidly evaluate FLX475's efficacy in multiple tumor types both as a single agent and in combination with other immuno-oncology agents such as programmed cell death 1 ("PD-1") checkpoint inhibitor. Our goal is to expeditiously progress into registration trials to ultimately enable treatment of cancer patients for whom current treatments are inadequate.
- Enhance the impact of RPT193 by expanding development across multiple allergic diseases. We are initially developing RPT193 for AD because the characteristics of the disease present an opportunity to rapidly demonstrate RPT193's anti-inflammatory effect. We believe this anti-inflammatory effect, along with its convenient oral administration and good preclinical safety profile, has potential clinical translatability in a variety of allergic diseases beyond AD, including allergic asthma, chronic urticaria, chronic rhinosinusitis, allergic conjunctivitis and eosinophilic esophagitis.

- Develop and advance a preclinical RPT-GCN2 inhibitor into clinical trials. We view our preclinical programs as important drivers
 of long-term growth and stability of our company. Our goal is to rapidly advance our programs to generate validating preclinical data
 that warrant clinical development.
- Expand our pipeline by leveraging our proprietary drug discovery and development engine and small molecule expertise. We believe there are additional identifiable targets that will be important to fundamentally modulating the immune response in the treatment of cancer and inflammatory diseases. We will continue to invest in our proprietary discovery and development engine and investigate several of our identified targets as well as generate additional target and drug candidates, including a future HPK1 drug candidate.
- **Utilize collaborations in support of our long-term goals.** We plan to selectively use collaborations and partnerships as strategic tools to maximize the value of our drug candidates.

Drug Discovery and Development Engine

We credit our rapid identification of therapeutic targets and drug candidate selection to our proprietary drug discovery and development engine, which relies on our team's deep expertise in immunology and chemistry, supported by strong computational biology and the ability to exploit difficult targets through our advanced discovery engine. The key pillars of our proprietary drug discovery and development engine are as follows.

Our Integrated Drug Discovery and Development Engine is Designed to Improve Probability of and Speed to Clinical Success



1) Computationally-Driven Disease Target and Biomarker Identification. We use proprietary methods to identify targets that we believe have a high propensity to drive the immune response in disease states such as in oncology and inflammatory diseases by computationally screening a combination of proprietary and public databases. Through this process we also identify biomarkers that can guide our clinical development strategy and increase the probability of clinical success. A computational screen we designed to seek tumor-infiltrating lymphocyte modulating genes

identified CCR4 and HPK1 as potential targets. In addition to well-known and clinically validated targets such as PD-1 and cytotoxic T-lymphocyte associated protein 4 ("CTLA-4"), our target identification approach has also uncovered what we believe are key immune drivers of pathology that have not been fully explored but which may offer significant therapeutic potential. We have designed additional screens that have identified potential targets controlling (i) tumor and immune metabolism, (ii) resistance to checkpoint therapy and (iii) suppressive myeloid cells.

- 2) Efficient Design of Small Molecule Drug Properties. Key to our rapid discovery of small molecules is our use of structure and pharmacophore-based drug design strategies, and machine-learning assisted structure-activity-relationships to improve potency, selectivity and pharmacokinetic ("PK") properties, along with early testing in physiologically-relevant immune assays to rapidly identify highly selective, orally-administered small molecules. This seamless integration of biology, chemistry and pharmacokinetic disciplines allows for rapid cycle times and quick iterations between hypothesis and compound selection. An example is our lead CCR4 program that moved from concept to first-in-human testing in two and a half years. Using pharmacophore modeling we identified novel templates which selectively inhibit the CCR4 receptor. These were then rapidly refined for biological activity and robust oral bioavailability. Once lead candidates are identified, strong in-house synthetic expertise quickly develops improved synthetic methodologies that facilitates large scale synthesis needed for broader testing. Employing these techniques allowed us to assess a variety of novel chemical structures to derive our clinical candidates FLX475 and RPT193, which have favorable potency and PK properties. We are now utilizing similar strategies and leveraging novel structure-based drug design techniques to improve potency, selectivity and pharmacokinetic properties to identify leads in our GCN2 and HPK1 programs.
- 3) Data-Driven Patient Selection. A key strategy for every program is to identify a patient selection and enrichment approach. Our proprietary drug discovery and development engine enables enrichment and prospective selection of patients in our early clinical trials that we believe increase the probability of clinical success. Using proprietary and public databases, we can mine contextually-rich molecular and clinical data from disease tissues to identify tumor types and inflammatory disease indications that we believe will be most likely to respond to our therapeutic agents.
- **Nimble Clinical Execution.** We believe our precision medicine approach enables a rapid path to PoC and the potential for accelerated regulatory approval.

We have leveraged this engine to identify and target CCR4, a key driver of the immune response in both oncology and allergic inflammatory disease. For FLX475, we achieved a rapid pace from concept to the clinic in only two and a half years, with RPT193 expected to enter the clinic in the second half of 2019.

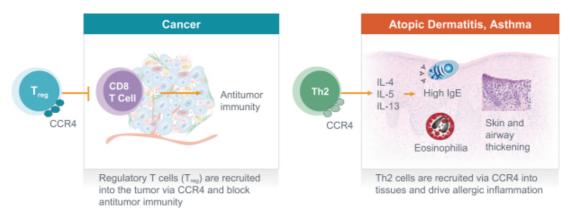
Background on CCR4 in Oncology and Allergic Inflammatory Disease

CCR4: A Key Modulator Across the Immunological Continuum

The immune system is a series of complex interactions between different types of white blood cells. T cells are one category of these cells that play crucial roles in immunological memory, regulation and responses. One subset of these T cells that are characterized by the cluster of differentiation 4 ("CD4") glycoprotein on their cell surfaces, the CD4 T cells, are paramount in directing immune responses and immune tolerance. Two main CCR4-expressing CD4 T cells of clinical interest are called T_{reg} and Th2 cells. T_{reg} and Th2 cells both express CCR4, which is a receptor that binds to chemokines that orchestrate cell migration and homing throughout the body. The two chemokines that bind to this receptor, C-C motif chemokine ligand 17 ("CCL17") and C-C motif chemokine ligand 22 ("CCL22"), are over expressed and secreted by tumors and allergically inflamed tissues.

This over expression allows for the theoretical manipulation of CCR4 and, consequently, its two CD4 T cell subtypes to address diseases across the immunological continuum spanning underactive to overactive immune responses in oncology and allergic inflammatory disease.

CCR4 Drives Tumor Progression and Allergic Inflammation



CCR4: Modulating Underactive Immune Activity in Oncology

In cancer, the secretion of certain chemokines from tumor cells and tumor-resident immune cells recruits immunosuppressive T cells called T_{reg} to tumor sites. T_{reg} represent a dominant pathway for downregulating the immune response. Blocking the migration of T_{reg} has been shown to have both the potential to unleash naturally-occurring antitumor immunity and to synergize with a variety of both conventional and immune-based therapies, such as radiation, chemotherapy, checkpoint inhibitors and adoptive T cell therapy. T_{reg} recruitment into tumors is dependent on CCR4, whose ligands are produced by tumor cells themselves or by tumor-associated macrophages. CCR4 is highly expressed on T_{reg} and not highly expressed or used by effector or cytotoxic T cells, suggesting that targeting CCR4 may selectively block T_{reg} migration into tumors. We believe that a therapeutic drug that specifically inhibits T_{reg} migration into tumors has the potential to specifically enhance immuno-oncology efficacy without the serious risks associated with current CCR4 approaches that systemically deplete T cells and broadly suppress the immune system.

CCR4: Modulating Overactive Immune Activity in Inflammation

In allergic inflammatory diseases, such as AD and asthma, CCR4 chemokines recruit Th2 cells to inflamed tissues. Once these cells enter certain tissues, such as the skin or the airways in the lung, they secrete products known to drive the inflammatory response. In allergic asthma, Th2 cells have been demonstrated to play a pivotal role in airway inflammatory response and airway remodeling. CCR4 is essential in recruiting Th2 cells to asthmatic airways. Similarly, murine models and ex vivo studies strongly suggest that CCR4 plays a critical role in allergic inflammation in AD. Blocking the migration of Th2 cells has been shown to reduce allergic inflammation in the skin and the lung. We believe that CCR4 antagonists have the potential to suppress allergic inflammation in patients in a clinically meaningful manner.

Our Lead Oncology Drug Candidate—FLX475

Our lead oncology drug candidate, FLX475, is designed to selectively inhibit the migration of immunosuppressive T_{reg} into tumors. In a Phase 1 clinical trial in 104 healthy volunteers, FLX475 was well tolerated and demonstrated favorable drug-like properties and target engagement. FLX475 has also demonstrated single agent and combination activity in preclinical tumor models associated with the inhibition of T_{reg} migration into the tumor and an increase in the CD8 : T_{reg} ratio. We are currently conducting a Phase 1/2 clinical trial

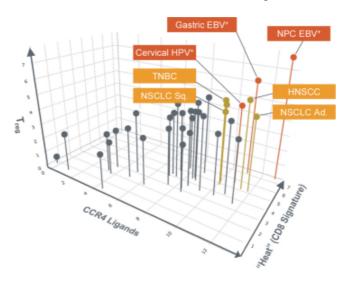
investigating FLX475 as a single agent and in combination with pembrolizumab in "charged" tumors where we believe it has the greatest probability of clinical benefit. We anticipate results from the Phase 2 portion of the trial could provide PoC data in the first half of 2020.

We hold worldwide rights to FLX475 and own an issued U.S. composition of matter patent with respect to FLX475 that is scheduled to expire in 2037.

CCR4 in Charged Tumors

Our proprietary drug discovery and development engine has identified certain tumors where we believe FLX475 has the greatest probability of demonstrating clinical benefit. We refer to these tumors as "charged" as defined by (i) their expression of high levels of CCR4 ligands, (ii) their enrichment for T_{reg} and (iii) their enrichment for CD8+ effector cells. Tumors with high levels of these three parameters imply they have the necessary components to generate a potent immune response; however, the presence of T_{reg} dampens this response. As shown in the diagram below, we have identified numerous tumors as being charged, including NSCLC, TNBC, HNSCC, NPC, gastric cancer, EBV+ HLs and NHLs and cervical cancer. The data presented in the diagram below was derived from an in-house analysis of The Cancer Genome Atlas Database and additional published sources and confirmed by us through in situ hybridization of over 400 tumor microarray samples.

Identification and Characterization of "Charged" Tumors

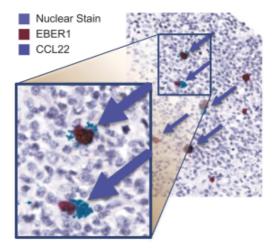


The graph above reflects a logarithmic scale on each axis.

Additionally, we have discovered that the presence of oncogenic viruses, such as EBV, (as shown in the diagram below) and HPV, is associated with tumors that are highly "charged" and can be prospectively selected. In preclinical studies, we have demonstrated an association between EBV and CCR4 ligand expression, which is believed to be causal to T_{reg} migration. These studies are further validated by scientific publications linking EBV to T_{reg} tumor infiltration in HL, gastric cancer and NPC.

"Charged" Tumors Include EBV-Associated Tumors

Hodgkin Lymphoma In situ hybridization



- High concordance of EBV and CCL22
- Similar pattern in nasopharyngeal and gastric carcinoma

EBER1 = EBV-encoded RNA1

Oncology Market Overview

Significant progress in cancer treatment has been made recently with the development of highly targeted and immuno-oncology-based therapies. Remarkable clinical response rates have been observed with targeted therapies in selective patient populations, while in a subset of a broad range of tumors, immuno-oncology products have demonstrated durable responses and possible cures. Although true breakthroughs have been achieved, often only a very narrow segment of the patient population can be treated or are responsive to these novel therapies. Hence, there remains a significant unmet medical need for a majority of tumor types including "charged" tumors in which we intend to develop FLX475 either as single agent or in combination with immune checkpoint inhibitors such as pembrolizumab or other agents.

"Charged" Tumor Prevalence

Tumor Type	Prevalence* (U.S.)	Virally Associated	Percent Viral	Estimated Percent "Charged"**	
Non-Small Cell Lung Cancer	268,600	N/A			
Triple Negative Breast Cancer	145,500	N/A		60-80%	
Head and Neck Squamous Cell Carcinoma	143,000	✓	25%-60%		
Nasopharyngeal Cancer	105,000***	✓	>95%		
Hodgkin Lymphoma	28,500	✓	30%-50%	>90% of virally associated tumors	
Cervical Cancer	46,800	✓	>95%		
Non-Hodgkin Lymphoma	225,000****	/	Widely variable among subtypes		

- * Based on 2012 Globocan registries 5-year prevalence (2008-2012 estimates)
- ** Data from in-house analysis
- *** Worldwide prevalence
- **** Based on 2018 Globocan registries 5-year prevalence (2013-2018 estimates)

Non-Small Cell Lung Cancer

NSCLC is the most common type of lung cancer, representing 84% of all lung cancer cases in the United States. Squamous cell carcinoma ("NSCLC Sq."), adenocarcinoma ("NSCLC Ad."), and large cell carcinoma are all subtypes of NSCLC. Lung cancer is the leading cause of cancer death for both men and women. In 2019, an estimated 142,670 people in the United States will die from lung cancer. There are approximately 228,000 diagnoses of lung cancer annually in the United States. Despite the availability of numerous available therapies, the prognosis remains poor, with an overall five-year survival rate for all patients diagnosed with NSCLC as low as 19.4%.

Standard therapies include surgery, chemotherapy and radiation therapy. Up to a third of NSCLC patients have tumors with mutations in genes (such as epidermal growth factor receptor and anaplastic lymphoma kinase) for which molecularly-targeted therapies have been approved (such as erlotinib, gefitinib or crizotinib). However, these treatments usually do not result in long-term remissions, and the tumors generally return and become resistant to therapy.

Immunotherapies that target PD-1 or the PD-1 ligand ("PD-L1") (e.g. pembrolizumab, nivolumab and atezolizumab) have recently been approved for the treatment of patients with advanced or metastatic NSCLC either alone (for previously untreated or treated patients), or in combination with chemotherapy (for previously untreated patients). While treatment with these immunotherapy agents in NSCLC has resulted in promising activity ranging from approximately 15-30% overall response rates in previously treated patients to approximately 40-60% response rates in combination with chemotherapy in previously untreated patients. However, approximately 50-80% of patients do not respond to these therapies, indicating significant unmet medical need remains.

Triple-Negative Breast Cancer

Breast cancer is the most common type of invasive cancer among women and the second leading cause of cancer death. The Centers for Disease Control and Prevention ("CDC") estimates that there are approximately one million women in the United States living with breast cancer that has been diagnosed within the past five

years. In 2019 there will be an estimated 271,270 new diagnoses and 42,260 breast cancer deaths in the United States each year and 12.4% of women will develop breast cancer in their lifetime. Effective therapies have been developed that target tumors containing at least one of three protein receptors: estrogen receptor, progesterone receptor and human epidermal growth factor receptor 2 ("HER2").

Approximately 15% to 20% of breast cancers, however, do not express any of these three receptors and are referred to as triple-negative breast cancer ("TNBC"). These tumors have a more aggressive phenotype and a poorer prognosis due to the high propensity for metastatic progression and absence of specific targeted treatments. Prior to the recent anti-PD-L1 approval, the only approved targeted therapy for TNBC was olaparib (marketed as Lynparza) for the small minority of patients with mutations in the BRCA1 or BRCA2 genes. The five-year survival rate for TNBC has been reported to be 62.1%.

However, there is also potential for immuno-oncology agents in TNBC based on its high tumor mutation burden and the finding of elevated levels of PD-L1 in up to 26% of primary TNBCs. Treatment of previously untreated metastatic TNBC patients can result in approximately 20-25% response to PD-(L)1 checkpoint inhibitors. The anti-PD-L1 antibody atezolizumab (marketed as Tecentriq) was recently granted accelerated approval in combination with chemotherapy for the initial treatment of women with advanced TNBC expressing PD-L1. However, in previously treated TNBC, response rates to anti-PD-L1 agents alone have generally been less than 10%, representing substantial need for novel and improved therapies for advanced or metastatic TNBC.

Head and Neck Squamous Cell Carcinoma

HNSCC represent a broad category of cancers that arise from different tissues that have been grouped anatomically in the head and neck region. HNSCC accounts for about 4% of all cancers in the United States with an estimated 53,000 new cases and 10,860 deaths in 2019. The five-year survival rate for people with head and neck cancer varies and depends on several factors making an overall five-year survival rate difficult to track accurately. Most cases of HNSCC are considered to be related to use of tobacco, alcohol, or to the exposure to HPV.

Treatment for HNSCC can include surgery, radiation therapy, chemotherapy, targeted therapy or a combination of treatments. These tumors are believed to express a fair number of tumor-specific antigens, making them attractive targets for immunotherapies. Nivolumab and pembrolizumab have been approved for recurrent and metastatic HNSCC based on their ability to shrink tumors and increase median survival. However, treatment with either agent led to partial or complete tumor shrinkage in approximately 15% of treated HNSCC patients, indicating that over 80% of patients do not respond to therapy and that a significant unmet clinical need remains.

Nasopharyngeal Cancer

NPC is a cancer that forms in the tissues of the nasopharynx which is the upper part of the throat behind the nose. It is estimated that approximately 129,000 NPC patients worldwide were diagnosed and 72,900 NPC patients died in 2018. Approximately 39% of patients are diagnosed with late stage NPC, in which the five-year survival rate is 38%. While there is no known cause of NPC, EBV is associated with a vast majority of cases.

Standard treatment for NPC involves radiation therapy, chemotherapy and surgery. There is some evidence that NPC can be treated with immuno-oncology agents. A Phase 1b trial in patients with recurrent or metastatic NPC found an objective response rate of 26% with a PD-1 inhibitor pembrolizumab. While promising, novel therapies for NPC are still needed to improve overall responses and prolong survival.

Hodakin Lymphoma

Hodgkin lymphoma, formerly called Hodgkin's disease, is a cancer of the lymphatic system that arises in immune cells called B cells. HL accounts for approximately 10% of all lymphomas and approximately 0.6%

of all cancers diagnosed in the developed world annually. Approximately 8,100 people in the United States are estimated to be diagnosed with HL in 2019, with an estimated 1,000 deaths. EBV has been associated with approximately 30% to 50% of HL.

While approximately 75% of patients can be cured with standard therapies including combination chemotherapy, radiation therapy, high-dose chemotherapy and stem cell transplantation, novel therapies are being developed to further improve clinical outcomes. The CD30-directed antibody-drug conjugate brentuximab vedotin (marketed as Adcetris) has been approved for certain adult patients with classical HL ("cHL"). Nivolumab and pembrolizumab are immunotherapies that have been granted accelerated approval for the treatment of patients with cHL that has recurred or progressed after multiple previous treatments, including autologous transplantation and post-transplant treatment with brentuximab vedotin. For both pembrolizumab and nivolumab, the overall response rate in these relapsed and refractory cHL was approximately 69%. However, the average duration of response to these anti-PD-1 therapies is less than a year, signifying the need for continued advances.

Non-Hodgkin Lymphoma

NHL, another cancer of the lymphatic system, is not a single disease but rather a group of cancers affecting cells of the immune system. Although the various types of NHL have common elements, they differ in other areas, including their appearance under the microscope, their molecular features, their growth patterns, their impact on the body, and treatment. According to the National Cancer Institute, in the United States approximately 74,200 patients were diagnosed with NHL in 2018 and 19,910 patients died as a result of NHL in 2018. The five-year survival rate is 71.4%. While there is no direct cause of NHL, it is generally linked to a weakened immune system and begins when the body produces too many abnormal lymphocytes.

There is a wide range of therapies available for the treatment of NHL depending on the subtype of the disease, its aggressiveness and the patient's overall health. These include chemotherapy; radiation therapy; immunotherapy such as monoclonal antibodies; checkpoint inhibitors and chimeric antigen receptor T cells ("CAR-T cells"); targeted therapies; and stem cell transplantation. Depending upon the analysis and subtype, EBV has been associated anywhere from less than 10% to greater than 90%, or approximately 12% of NHL, on average.

Cervical Cancer

Cervical cancer begins with abnormal changes in the cervical tissue. In the United States, 13,170 patients are estimated to be diagnosed with cervical cancer in 2019 with cervical cancer leading to 4,250 deaths. The five-year survival rate is 65.8%. It is almost always associated with the presence of HPV.

Advanced cervical cancer is treated by chemotherapy or radiation therapy. Pembrolizumab has been approved in those patients that express PD-L1 based on a Phase 2 trial in which the response rate was 14.3%. While the approval of pembrolizumab has been an advance in the treatment of cervical cancer, over 80% of patients do not respond to this therapy, indicating significant room for improvement.

Our Oncology Solution: FLX475

 T_{reg} represent a dominant pathway for downregulating the immune response. Many current approaches to deplete T_{reg} in the tumor have resulted in systemic T_{reg} depletion, and such approaches been associated with serious safety issues (such as autoimmunity). In addition, these approaches have been associated with the depletion of effector immune cells, which has the potential to limit their efficacy.

FLX475 is an oral small molecule that is designed to selectively inhibit the migration of immunosuppressive T_{reg} into tumors while sparing T_{reg} in healthy tissues and without negatively impacting

effector immune cells. We will initially develop FLX475 in "charged" tumors, in which we believe there remains significant unmet medical need. In preclinical studies, our drug candidate appears to selectively restore the immune response within the TME without systemically depleting T cells. We believe FLX475 has attractive characteristics for use as a single agent and in combination regimens with a variety of both conventional and immune-based therapies given its favorable safety profile observed to date in preclinical studies and in healthy volunteers, as well as the synergistic nature of its mechanism of action as demonstrated in preclinical mouse models.

In a Phase 1 clinical trial in 104 healthy volunteers, FLX475 was well tolerated and demonstrated dose-dependent inhibition of CCR4 with no observed immune-related adverse events or significant clinical adverse events. We are currently conducting a Phase 1/2 clinical trial investigating FLX475 as a single agent and in combination with pembrolizumab in patients with tumors that are likely to be "charged" where we believe FLX475 has the greatest probability of clinical benefit. We anticipate PoC data from the Phase 2 portion of the trial in the first half of 2020.

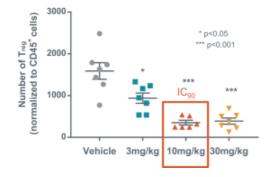
FLX475 Preclinical Data

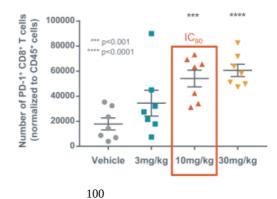
We evaluated the mechanism of action as well as the antitumor activity of FLX475 (or a preclinical tool CCR4 antagonist) in two kinds of preclinical mouse tumor models representing the human equivalent of (i) a "charged" tumor and (ii) tumors that accumulated T_{reg} in the TME following checkpoint inhibitor treatment.

FLX475 Inhibition of T_{req} in a Mouse Model of a "Charged" Tumor

Immunosuppressive CCR4⁺ T_{reg} migrate towards CCL17 and CCL22 which are often found to be elevated in the TME. FLX475 inhibited in a dose-dependent manner CCL22- and CCL17-induced migration of T_{reg} in cellular in vitro migration assays. Dosing of FLX475 prevented migration of T_{reg} into established tumors expressing high levels of CCR4 ligand at baseline ("charged" tumor), as represented by a Pan02 mouse tumor model. In this model, mice with established tumors were dosed with FLX475, then injected with labeled T_{reg} . The migration of these modified T_{reg} into tumors could then be easily followed and quantified. In two independent experiments with seven mice per experimental arm, FLX475 inhibited this migration in a statistically significant and dose-dependent manner (p < 0.01). In these studies a dose of 10 mg/kg reduced T_{reg} migration by averages of 56% and 78% in the two studies, with individual animals ranging from 42% to 85% reduction. Blocking the migration of T_{reg} into tumors also enhanced the activation and increased the number of CD8+ effector cells in a dose-dependent manner with a 3-fold increase at the 10 mg/kg dose level (range from 1.7 to 4.1 fold in individual animals in one experiment). The highest level of inhibition of T_{reg} migration and increase in CD8+ effector cells was observed in our preclinical studies at 10 mg/kg given once daily, which achieves concentrations that inhibit 90% of in vitro T_{reg} migration ("IC90") throughout the dosing period.

Blocking CCR4 with FLX475 Inhibits Treg Migration into the Tumor

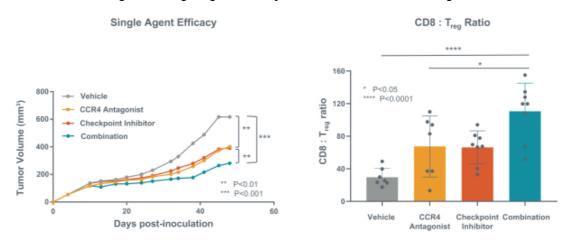




CCR4 Antagonist Single Agent Antitumor Activity in a Mouse Model of a "Charged" Tumor

The antitumor activity of a CCR4 antagonist closely related to FLX475 was assessed in the Pan02 mouse tumor model, which represents a "charged" tumor. In three independent experiments with ten mice per experimental arm, oral administration of the CCR4 antagonist demonstrated single agent reduction in tumor growth which was statistically significantly different from mice who received vehicle control (p < 0.05). The observed antitumor activity was similar to an immune checkpoint inhibitor in three of four experiments. Importantly, the combination of our CCR4 antagonist with the checkpoint inhibitor resulted in enhanced antitumor activity. Analysis of the TME of seven to eight mice per experimental arm treated with our CCR4 antagonist showed a statistically significant increase in the CD8 : T_{reg} ratio compared to vehicle control and similar activity compared to the checkpoint inhibitor. Consistent with the antitumor activity, combination of our CCR4 antagonist with the immune checkpoint inhibitor further increased this ratio. The increase of this ratio demonstrates a shift from an immune-suppressive to an immune-stimulatory environment. The CD8 : T_{reg} ratio is a well-established biomarker in human clinical trials and has been demonstrated to correlate with clinical outcome.

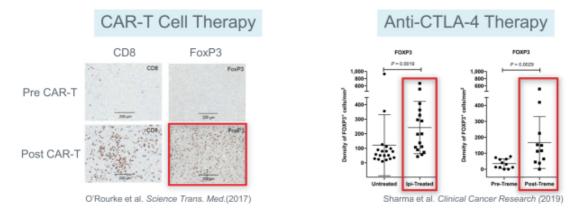
CCR4 Antagonist: Single Agent Activity in a Mouse Model of a "Charged" Tumor



CCR4 Antagonism of Trea Migration Following Checkpoint Inhibitor Treatment in Mouse Model of a Non-"Charged" Tumor

Clinical studies have demonstrated the accumulation of T_{reg} in the TME following treatment with conventional therapies such as chemotherapy and radiation, as well as immune-based therapies such as CAR-T cell and checkpoint inhibitor therapies. The figure below shows several examples of T_{reg} accumulation in the TME of patients who underwent treatment with CAR-T cell or anti-CTLA-4 immune checkpoint inhibitor therapies. FoxP3 is a marker used to identify T_{reg} . Ipilimub (Ipi) and Tremelimumab (Treme) are both anti-CTLA-4 antibodies.

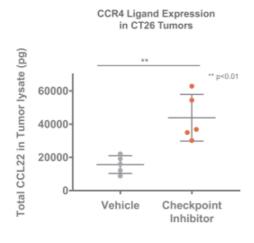
Accumulation of Treg in the TME is a General Adaptive Immune Resistance Mechanism to Treatment

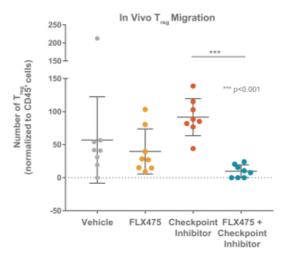


Accumulation of T_{req} has also been observed in both post anti-PD-1 and after conventional therapies such as radiation or chemotherapy

To mimic this in a preclinical tumor model, we evaluated FLX475 in a mouse tumor model that does not express high levels of CCR4 ligands, exemplified by the CT26 mouse tumor model. We observed in four independent experiments with five mice per experimental arm that the treatment with checkpoint inhibitors led to a statistically significant (p < 0.05) increase in the expression of CCR4 ligands with an average increase of 2.9 fold over vehicle control and a range from 1.6 to 4.3 fold. In two independent experiments with eight mice per treatment cohort we observed a 1.6-fold (range 0.8 to 2.4) increase in the number of T_{reg} that infiltrate the tumor, recapitulating the clinical observations mentioned above. We believe that the increase in the infiltration of T_{reg} upon treatment with the checkpoint inhibitor is representative of one mechanism of resistance seen in patients treated with these inhibitors. Importantly, in these two independent experiments with eight mice per experimental arm we observed that the addition of FLX475 to the checkpoint inhibitor reduced the number of T_{reg} migrating into the TME in a statistically significant manner.

FLX475 Inhibition of T_{reg} Migration Following Checkpoint Inhibitor Treatment in a Mouse Model of a Non-"Charged" Tumor

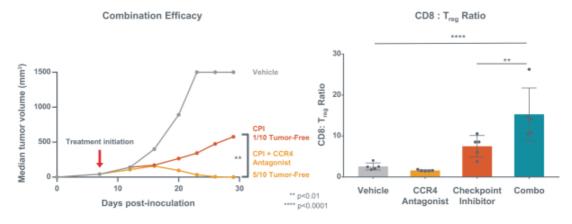




Antitumor Activity of the Combination of a CCR4 Antagonist and Checkpoint Inhibitor in a Mouse Tumor Model

The antitumor activity of a CCR4 antagonist closely related to FLX475 in combination with an immune checkpoint inhibitor was evaluated in the CT26 mouse tumor model in five independent experiments with ten mice per experimental cohort. Single agent activity of an immune checkpoint inhibitor results in modest antitumor activity and almost no cures. However, the combination of a CCR4 antagonist and an immune checkpoint inhibitor resulted in statistically significant (p < 0.05) synergistic antitumor activity with 50% of all mice showing complete tumor regression in the experiment shown. In multiple experiments, an average of 39% experienced tumor regression (0%-70% across studies). Mice treated with the combination approach were completely resistant to rechallenge with the same tumor, confirming that the antitumor effect observed during the treatment phase was immune-mediated and associated with long-term immune memory. The combination of inhibition of T_{reg} by a CCR4 antagonist with an immune checkpoint inhibitor in three independent experiments with eight mice per experimental cohort demonstrated an increase in the ratio of CD8+ effector T cells to T_{reg} . Previous studies have shown that this ratio is an indicator of prognosis in many cancers. Patients with low effector T cell to T_{reg} ratios have worse prognoses in cancers that include ovarian cancer, pancreatic cancer, lung cancer, glioblastoma, NHL and melanoma. We believe that the ability of a CCR4 antagonist to increase this ratio and provide therapeutic benefit will not be limited to a few select cancers, but may have broad implications across many tumor types. The ability of a CCR4 antagonist to prevent T_{reg} migration suggests that combining FLX475 with a checkpoint inhibitor may provide highly effective antitumor activity by potentially deepening or broadening responses compared to checkpoint inhibitor alone.

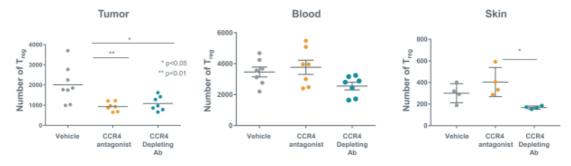
Antitumor Activity of Our CCR4 Antagonist and Checkpoint Inhibitor in Combination in a Mouse Tumor Model



Our CCR4 Antagonist Selectively Inhibits T_{req} Migration into Tumors but not Healthy Tissues

The impact of CCR4 inhibition by a CCR4 antagonist was compared to a depleting CCR4 antibody on T_{reg} migration into the tumor and healthy tissue in a mouse tumor model, which included two independent experiments with seven mice per experimental arm. Mice with established tumors were dosed with either our CCR4 antagonist or a depleting CCR4 antibody, then injected with fluorescently labeled T_{reg} to assess the level of T_{reg} migration into the tumor and healthy tissues. Both our CCR4 antagonist and the antibody led to statistically significant (p<0.05) reductions in T_{reg} that were able to infiltrate the tumor compared to untreated controls. However, in contrast to the antibody, our CCR4 antagonist did not result in depletion or inhibition of migration of T_{reg} in the blood or skin (demonstrated in two separate experiments). We believe that the tumor-selective activity of our FLX475 will enable reductions in tumor T_{reg} with a decreased likelihood of deleterious adverse events that may result from systemic depletion of all T_{reg} .

Our CCR4 Antagonist Selectively Inhibits Treg Migration into Tumors but Not Healthy Tissues



FLX475: Clinical Trials

FLX475-01: A Phase 1 Clinical Trial of FLX475 in Healthy Volunteers

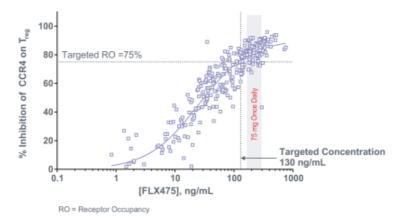
We completed a placebo-controlled, double-blind dose-escalation Phase 1 clinical trial of FLX475 in 104 healthy volunteers. We designed and conducted the healthy volunteer study in order to (i) rapidly generate PK and receptor occupancy data that allow us to identify a therapeutic dose, (ii) corroborate in humans our observed favorable preclinical safety profile and (iii) potentially allow us to accelerate the dose-escalation portion of our Phase 1/2 oncology study and drive efficiencies in our clinical development going forward. FLX475 was well tolerated and demonstrated dose-dependent inhibition of CCR4 with no observed immune-related adverse events or significant clinical adverse events.

Oral dosing of FLX475 led to linear PK and a clear dose-related inhibition of CCR4 with low subject-to-subject variability. Based on analysis of the multiple dose data, at the 75 mg once-daily dose, 75% receptor occupancy was achieved in six out of six healthy volunteers, which, in our preclinical studies, corresponded with 90% inhibition of in vitro T_{reg} migration and the highest level of inhibition of in vivo T_{reg} migration and antitumor activity.

300 25 mg QD FLX475 (ng/mL) 50 mg QD 200 75 mg QD Projected Efficacious 100 Exposure 0 5 10 15 0 Day 104

FLX475: Favorable Exposure in Healthy Volunteer Study

CCR4 Target Coverage Exceeded at 75 mg Once Daily Dosing with FLX475

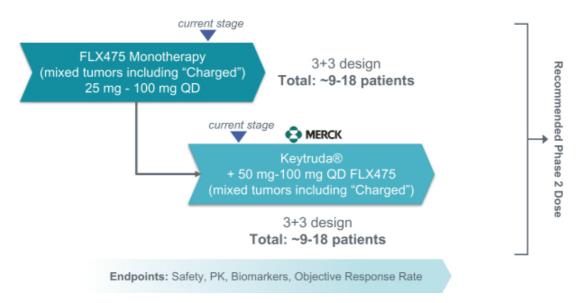


FLX475 was well tolerated, with no significant lab abnormalities, serious adverse events or dose-limiting clinical adverse events. There was no evidence of autoimmunity or changes in peripheral blood immune cell populations. Sporadic Grade 1 corrected Q-T interval ("QTc") prolongation was observed in nearly every cohort (including placebo). No QTc prolongation greater than Grade 1 was observed in 14-day multiple ascending dose cohort doses through 300/100 mg (300 mg Day 1 loading dose followed by 100 mg once daily), including the projected efficacious dose of 75 mg once daily. At the highest dose (300/150 mg) correlating with exposures three to five times that needed to achieve efficacious exposure, two subjects (out of six dosed with FLX475) met QTc stopping criteria (greater than 60 msec prolongation from baseline, one of whom also exhibited a transient Grade 2 QTc prolongation), which were asymptomatic and not associated with arrhythmia or any other adverse event.

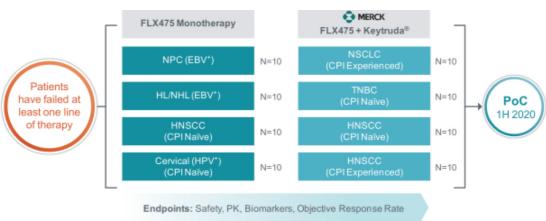
FLX475-02: A Phase 1/2 Dose Escalation and Expansion Study of FLX475 Alone and in Combination with Pembrolizumab in Advanced Cancer

We are currently conducting a Phase 1/2 clinical trial of FLX475 as monotherapy and in combination with pembrolizumab in patients with EBV or HPV and other "charged" tumors. We are currently in the Phase 1 arm of this trial in which the PK and safety of FLX475 are being investigated as monotherapy and in combination with pembrolizumab. In the first stage of the Phase 2 arm of this trial, FLX475 cohorts of ten patients grouped by indication will be dosed with FLX475 as monotherapy or in combination with pembrolizumab. Monotherapy patients will either have NPC or lymphoma confirmed to be EBV+, cervical cancer that is HPV+ or HNSCC that is naïve to checkpoint therapy. NSCLC or HNSCC patients who are relapsed or refractory to checkpoint inhibitors or TNBC or HNSCC patients naïve to checkpoint inhibitors will be dosed with FLX475 in combination with pembrolizumab. We anticipate obtaining data on overall response rates in the Phase 2 arm of this trial throughout the first half of 2020. Cohorts in which promising activity is observed will then proceed into Stage 2, enrolling an additional 19 patients.

FLX475 Phase 1 Dose Escalation



FLX475 Phase 2 Trial: Rapid Path to PoC in 1H 2020



CPI = Checkpoint Inhibitor

Gated 2-stage design:

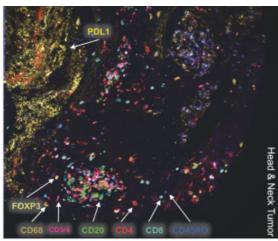
- First stage enrollment (10 patients/cohort) expected by YE 2019
- Second stage: if positive ORR in a cohort, enroll additional 19 patients

Accumulating results from the FLX475-02 Phase 1/2 study will inform available clinical development options that can be leveraged in near real time. For example, if we observe promising clinical data with FLX475 monotherapy in a specific Phase 2 expansion cohort (such as a high overall response rate), we could then initiate planning for a potential pivotal trial. Examples of such a trial include a single-arm study in a patient population with high unmet need (e.g. either a single disease, or "basket" of virally-associated tumors, with no available standard therapy options), and in a randomized trial against standard therapy(ies). Similarly, data from a particular Phase 2 combination cohort could be considered promising enough to plan for a randomized Phase 2 or 3 study comparing FLX475/pembrolizumab combination therapy against pembrolizumab alone. Based on

historical examples, it may be possible to modify the current Phase 1/2 trial to seamlessly proceed into one or more pivotal trials, thus saving significant clinical development time to potential regulatory submission and approval.

In addition, biomarker data obtained from the patients in the ongoing Phase 1/2 trial may inform the generation of a companion diagnostic that could potentially be used to prospectively select for patients who may be more likely to respond to FLX475 therapy in a future study, thus increasing the chances of a positive trial result and regulatory approval. Our comprehensive biomarker plan includes analysis of the TME in paired biopsies collected before and on treatment. Key biomarkers include (i) CD8: T_{reg} ratio as detected by immunohistochemistry, (ii) expression of CCL17 and CCL22 as detected by in situ hybridization (iii) receptor occupancy, (iv) peripheral blood analysis for CCL17 and CCL22 and (v) exploratory analysis, including immune phenotyping, transcriptomics and T cell clonality. An example of the multiplexed immunohistochemistry analysis of the TME derived from a commercially-available tumor sample is shown in the figure below.

Multiplexed Immunohistochemistry Analysis of the TME



Multiplexed Immunofluorescence

Our Lead Inflammation Drug Candidate—RPT193

Our lead inflammation drug candidate, RPT193, selectively inhibits the migration of Th2 cells into allergically-inflamed tissues. Th2 cells are clinically validated drivers of allergic diseases such as AD, asthma, chronic urticaria, allergic conjunctivitis, chronic rhinosinusitis and eosinophilic esophagitis. The current standard of care for AD, the first indication for which we are pursuing clinical development, includes topical creams and steroids as well as the injectable biologic, dupilumab. Dupilumab was approved for moderate to severe AD in 2017 as well as in moderate to severe asthma in late 2018, achieving \$922 million of worldwide net sales in 2018. Despite recent progress in the treatment of inflammatory diseases, including AD, we believe there remains a significant unmet need for a safe, oral treatment with an attractive efficacy profile.

Our preclinical pharmacology and toxicology results for RPT193 showed activity in clinically validated pathways in allergic inflammatory disease models to a degree we believe, if confirmed in clinical trials, would be competitive with currently marketed injectable biologics and show a safety profile that suggests chronic dosing in humans should be well tolerated. We believe the preclinical toxicology and activity results for RPT193, combined with the convenience of once-daily oral dosing, suggest a profile competitive with standard of care and emerging clinical-stage drug candidates. We intend to initiate a seamless Phase 1 trial of RPT193 comprised of Phase 1a single- and multiple-dose escalation cohorts in healthy volunteers in the second half of 2019, followed by placebo-controlled Phase 1b testing in patients with moderate to severe AD. Our CTA in Europe was accepted

in July 2019 and we plan to submit an IND in the United States in the third quarter of 2019 for this Phase 1 trial. We anticipate PoC clinical results from the Phase 1b portion of this trial in AD patients by mid-2020. Thereafter, we intend to expand clinical development into additional Th2-driven allergic diseases.

RPT193 is chemically distinct from FLX475, our CCR4 antagonist for oncology, and has demonstrated a unique pharmaceutical profile in preclinical experiments, that we believe will be favorable for use in non-oncology indications. Our data have shown that RPT193 has a lower PK parameter known as the volume of distribution relative to that of FLX475. Compounds with a lower volume of distribution, such as RPT193, are more likely to spare key organ systems from extensive drug exposure. Limited tissue exposure has the potential to contribute to a safety advantage for RPT193. Consistent with this, RPT193 has demonstrated a preclinical safety profile that suggests it would be well tolerated for chronic dosing in non-oncology indications.

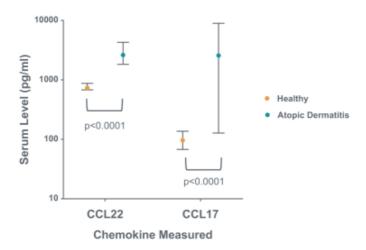
We hold worldwide rights to RPT193 and have submitted patent applications with respect to RPT193 that, if issued, would be scheduled to expire in 2039.

Background—Th2 Cells and Allergic Disease

Th2 cells express high levels of CCR4 and are clinically validated drivers of allergic diseases along the atopic march, which includes AD, asthma, chronic urticaria, allergic conjunctivitis, rhinosinusitis and eosinophilic esophagitis. When a pathogen comes into contact with the skin or mucosal lining of the nose or lungs, an immune response is triggered. It is believed that innate immune cells and antibodies that recognize the pathogen initiate a release of inflammatory cytokines, leading to the recruitment of other immune system components, including Th2 cells. Th2 cells secrete inflammatory cytokines, such as interleukin 4 ("IL-4"), interleukin 5 ("IL-5") and interleukin 13 ("IL-13"). While this Th2 response may be highly effective against foreign pathogens, particularly parasites, sometimes the body overreacts to benign substances in this way, resulting in a significant and presumably unnecessary influx of Th2 cells, leading to conditions along the atopic march.

At a cellular and molecular level, the Th2 response is initiated and sustained when Th2 cells are recruited to the site of inflammation by the binding of CCL17 and CCL22 to CCR4. Patients suffering from AD and other allergic diseases have significantly elevated levels of both CCL17 and CCL22, suggesting that inhibiting the ability of these chemokines to bind to CCR4 may prevent migration of Th2 cells into these inflamed sites, thus reducing inflammation.

CCR4 Ligands (CCL17 and CCL22) are Significantly Elevated in AD

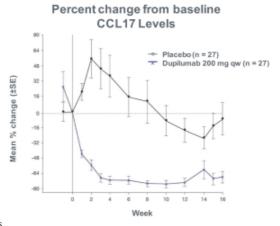


Thijs et al. Journal of Allergy and Clinical Immunology, 2018, supplemental data

CCL17 and CCL22 levels have been found to strongly correlate with the severity of many allergic diseases, including AD. Dupilumab works by blocking the receptor for IL-4 and IL-13, two of the cytokines produced by Th2 cells, leading to a reduction in the level of inflammation. Dupilumab also indirectly leads to reductions in the level of CCL17, thus breaking the Th2-driven inflammatory cycle. We believe that inhibition of the CCR4 receptor will block the migration of Th2 cells into these inflammatory sites, leading to reductions in inflammation thereby blocking the secretion of IL-4, IL-5 and IL-13 before they can induce tissue damage.

CCL17 Is a Good Marker for Response to AD Therapy (Dupilumab)

Percent change from baseline EASI score Placebo — Dupilumab 200 mg qw Dupilumab 200 mg qw Placebo — Dupilumab 201 mg qw Dupilumab 200 mg qw Dupilumab 200 mg qw Week

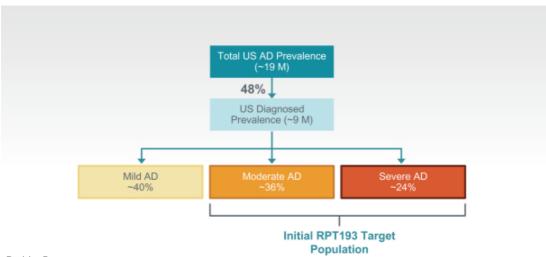


Guttman-Yassky et al. Journal of Allergy and Clinical Immunology, 2019, supplementary figures EASI = Eczema Area and Severity Index qw = Weekly dosing

Atopic Dermatitis Overview

AD is a chronic, inflammatory skin disease characterized by skin barrier disruption and immune dysregulation. Patients with AD have chronically inflamed skin lesions that cause, among other disabilities, debilitating pruritus (itch), which can severely impair quality of life. Onset of AD often occurs during childhood and can persist into adulthood. The estimated U.S. adult prevalence of AD is approximately 19 million individuals, of which approximately 50% are diagnosed. An estimated 60% of these adults have disease characterized as moderate to severe. Furthermore, an estimated 9 million children have AD, of which approximately 30% experience moderate to severe disease.

Atopic Dermatitis (AD) U.S. Prevalence*



*2018 Data, Decision Resources

AD Historical Standard of Care

Creams, ointments and topical steroids, or other topical or systemic anti-inflammatory agents, are routinely used to manage skin health and reduce skin inflammation in patients with mild to moderate AD. Patients who do not achieve sustained alleviation of symptoms with topical treatments have historically been prescribed systemic steroids or other systemic immunosuppressive agents such as cyclosporine. While these are effective as temporary treatments of flare-ups, extended use has been associated with many potential side effects or adverse events. Systemic steroids, such as prednisone, can lead to temporary symptom relief but their use is not recommended to induce stable remission due to numerous side effects and the propensity of severe disease flares upon treatment cessation. Cyclosporine is also not suitable for long-term use as it has been associated with renal toxicity, hirsutism, nausea and lymphoma, and patients must discontinue use after one to two years.

We believe that topical immunosuppressive agents inadequately address the systemic nature of AD. Furthermore, safety issues associated with systemic immunosuppressants such as steroids and cyclosporine make them inappropriate for chronic administration. The treatment paradigm in AD is evolving given these inadequacies of the historical standard of care agents.

AD Emerging Standard of Care

There are two key recent developments within the AD treatment landscape that will shape the standard of care in the future: (i) the approval of the biologic agent dupilumab for moderate to severe AD in 2017 and

(ii) the clinical progress of the class of oral Janus kinase ("JAK") inhibitors, which are in late stage clinical development and are anticipated to reach the market by 2021.

Dupilumab is a recently approved biologic for AD targeting the Th2 pathway. Dupilumab prevents T cell activation and amplification of proinflammatory signaling pathways by blocking the IL-4 receptor alpha, ("IL-4Ra"), preventing IL-4 and IL-13 binding. Approximately 36% of patients receiving weekly or biweekly injections of dupilumab achieved significant improvement in disease symptoms. Dupilumab was approved for moderate to severe AD in the United States in March 2017 and in Europe in September 2017. Net sales of dupilumab were \$257 million in 2017 and \$922 million in 2018, highlighting the growing demand for safe and effective systemic treatments of AD.

Among the orally administered JAK inhibitors in development for AD, there are three in Phase 3 development: upadacitinib, baricitinib and abrocitinib. JAK inhibitors block the signaling pathway to multiple proinflammatory cytokines, including IL-4 and IL-13, thereby preventing the downstream signaling of Th2 cells at the sites of inflammation. While JAK inhibitors have demonstrated comparable clinical efficacy to that of dupilumab and offer the advantage of oral dosing, these inhibitors are broadly immunosuppressive and therefore may not be suitable for long-term dosing. Additionally, the FDA has placed black box warnings for JAK inhibitors approved in other indications due to the potential for serious infections, malignancies and thromboembolic events.

Despite these recent developments, we believe that there is significant unmet medical need and market potential for a safe and efficacious agent for the treatment of AD. We believe that preventing the migration of Th2 cells into inflamed tissues with an oral CCR4 antagonist represents a highly differentiated approach. We further believe that an oral agent with a favorable safety and efficacy profile would offer an attractive alternative for patients compared to the biweekly injections associated with dupilumab. While the JAK inhibitor agents are orally administered, they are broadly immunosuppressive and therefore may not be suitable for long-term dosing.

Overview of Other Diseases Along the Atopic March

In addition to AD, a number of allergic diseases are characterized by an inflammatory response to cytokines produced by Th2 cells. These diseases include allergic asthma, chronic urticaria, chronic rhinosinusitis, allergic conjunctivitis and eosinophilic esophagitis.

Asthma

Asthma is a chronic inflammatory disease of the airways characterized by intermittent airway obstruction, swelling and mucus hyperproduction, which can result in coughing, wheezing and difficulty breathing. Allergic asthma is triggered by the inhalation of allergens including dust, pollen and dander. An estimated 25.2 million individuals in the United States have asthma, with allergic asthma as the most common subtype, constituting approximately 80% of asthmatic children and approximately 60% of asthmatic adults. Asthma is driven by both Th2 allergic and Th17 autoimmune mechanisms. An estimated 40% to 50% of patients with asthma fall within the Th2-high subtype characterized by elevated levels of IL-13 and IL-5.

Standard treatment of asthma includes inhaled rapid-acting beta₂-agonists for the treatment of acute symptoms and daily low-dose inhaled corticosteroid ("ICS") monotherapy as a first-line maintenance treatment. Anti-immunoglobin E ("Anti-IgE") monoclonal antibody omalizumab and IL-4Ra antagonist dupilumab can be prescribed for individuals with asthma who are uncontrolled on ICS therapy. While these therapies are generally effective, they are administered via injection and their targets are downstream of CCR4, presenting a market opportunity for an oral, upstream alternative.

Chronic Urticaria

Chronic urticarias ("CUs") are a group of skin conditions including chronic spontaneous urticaria ("CSU"), cholinergic urticaria ("CLU") and symptomatic dermographism that are characterized by hives,

redness, itching and swelling, lasting for greater than six weeks. The trigger for CSU is unknown; however, CLU is triggered by increases in body temperature and symptomatic dermographism by physical contact with the skin by exogenous mechanical stimuli. Symptoms result from the degranulation of dermal mast cells, and IgE signaling likely contributes to inappropriate mast cell activation. Urticaria affects 15-20% of the population at some point during their lifetime, with approximately 30% of urticaria patients experiencing recurring episodes.

Current treatment guidelines for CU recommend the use of oral H1-antihistamines as a first-line therapy, with dose escalation of up to four times the standard dose in lower responders. Up to 50% of patients with CSU do not respond to H1-antihistamines and can be prescribed omalizumab, an injected monoclonal antibody, which maintains an approximately 65% response rate as a second-line treatment. Given these response rates from approved biologic drugs, there remains an unmet need for a safe, efficacious therapy with a favorable oral dosing profile. CCL17 and CCL22 are elevated in chronic urticaria, supporting the potential use of RPT193 in this indication.

Chronic Rhinosinusitis

Chronic rhinosinusitis ("CRS") is a disease characterized by sinonasal mucosal inflammation, which results in facial pain/pressure, nasal drainage, nasal obstruction and reduction or loss of smell, for at least 8-12 consecutive weeks. Confirmation of the disease is required using an objective measure such as a nasal endoscopy or CT scan, given lack of symptom specificity. It is believed that approximately 5-15% of the general population experiences CRS, however, the prevalence of doctor-diagnosed CRS was found to be 2-4%. There is wide belief that CRS is a heterogeneous condition and that the causes of inflammation are diverse and multifactorial, involving overlap between both host and environmental triggers.

Standard treatment of CRS utilizes topical and oral steroids, antibiotics and ultimately surgical intervention if symptoms are not adequately controlled by available therapies. IgE antibodies may play a role in CRS, with total IgE levels correlating with disease severity, as assessed by CT scan. As a result, anti-IgE antibody omalizumab and anti-IL-5 antibodies reslizumab and mepolizumab have been evaluated as treatment alternatives for CRS, with reslizumab and mepolizumab now considered a recommended treatment for CRS patients with nasal polyps. Dupilumab has also demonstrated activity in CRS in Phase 3 trials. Compared to these widely used injectable biologics, we believe that an orally dosed therapy with comparable safety and efficacy results would have a competitive profile. Given the activity of the Th2-targeted biologics, we believe that RPT193 represents a potential oral treatment for this indication.

Allergic Conjunctivitis

Allergic conjunctivitis is an ocular disease in which the conjunctiva—the transparent tissue lining the eyelid and covering the white part of the eye—is inflamed as a result of exposure to allergens. Simple allergic conjunctivitis, vernal keratoconjunctivitis, atopic keratoconjunctivitis and giant papillary conjunctivitis are the four main types of allergic conjunctivitis. These different manifestations of conjunctivitis differ in their affected population and etiology. The majority of conjunctivitis patients have simple allergic conjunctivitis and this predominantly affects patients who are younger than 20 years old. Diagnosis is difficult to estimate given that patients often fail to report symptoms and do not seek medical attention, but it is estimated that between 10-30% of the general population suffers from this inflammation of the eye. In fact, more than 60% of individuals suffering from allergies are believed to have allergic conjunctivitis.

The current treatment paradigm for severe forms of simple allergic conjunctivitis has a combination of antihistamine and mast cell-stabilizing drops as the first-line of treatment. The second-line treatment is providing patients with topical nonsteroidal anti-inflammatory drops. Refractory patients are given corticosteroid drops for no more than two weeks, and clinicians may also opt to give patients systemic antihistamines. We believe there is an unmet need in the tolerability and safety profiles of patients with severe refractory cases of simple allergic conjunctivitis given the adverse events resulting from the long-term use of corticosteroids and antihistamines. CCL17 and CCL22 are elevated in allergic conjunctivitis, supporting the potential use of RPT193 in this indication.

Eosinophilic Esophagitis

Eosinophilic esophagitis is a chronic, allergic inflammatory disease of the esophagus. It is estimated that eosinophilic esophagitis affects at least 150,000 people in the United States. Studies from Western Europe, Australia and North America estimate prevalence to be 50-100 cases per 100,000 persons. Eosinophilic esophagitis is caused by the presence of a large number of eosinophils in the esophagus, which stems from many factors such as immune hypersensitivity, environmental proteins and genetics.

Standard treatment for eosinophilic esophagitis includes diet modification, esophageal dilation and drugs with topical corticosteroids as a first-line medication. It is estimated that there is at least a partial symptomatic response seen in 60% to 75% of adults with eosinophilic esophagitis who take topical steroids. While steroids offer symptomatic relief once treated, patients are required to continue maintenance regimens as disease recurrence is common after discontinuation of treatment. Dupilumab has demonstrated activity in eosinophilic esophagitis in clinical trials, supporting the potential use of RPT193 in this indication.

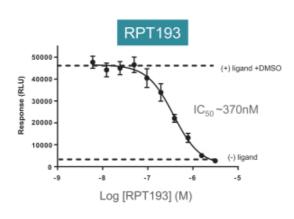
Our Allergic Disease Solution: RPT193

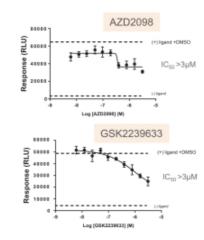
While there are marketed injectable biologics, as well as oral drug candidates and injectable biologics in clinical development, we believe there is an unmet need in the treatment landscape for a safe and efficacious oral therapy for the long-term treatment of AD.

	Biologics	Oral immune suppressants	
Safety	 Generally safe and well tolerated Some safety findings limit dosing in a subset of patients 	 Immunosuppressive Potential black box warning for infections, malignancies and thromboembolic events 	
Route of Administration	Injectable	Oral	
Efficacy	Durable clinical efficacy Activity in AD and asthma Similar to biologics		
 Favorable Characteristic Unfavorable Characteristic 			

RPT193 is an oral, small molecule CCR4 antagonist designed to block the migration of inflammatory Th2 cells into allergically inflamed tissues. In an in vitro chemotaxis assay, RPT193 was shown to block CCL22-induced chemotaxis of human Th2 cells with an IC $_{50}$ of \sim 370 nM. For comparison, two CCR4 antagonists from the published literature, AZD2098 and GSK2239633, both exhibited chemotaxis IC $_{50}$ of >3 μ M when assayed head to head in the same in vitro experiment.

CCL22-Induced Th2 Chemotaxis





In preclinical studies, oral administration of RPT193 resulted consistently in statistically significant (p < 0.05) reduction of inflammation in allergic skin (nine out of nine experiments) and airway inflammation models (two out of two experiments). We believe based on our preclinical pharmacology and GLP toxicology results, if confirmed in clinical trials, combined with the convenience of once daily oral dosing, RPT193 could fill an unmet medical need for the treatment of allergic disorders.

RPT193 Preclinical Data

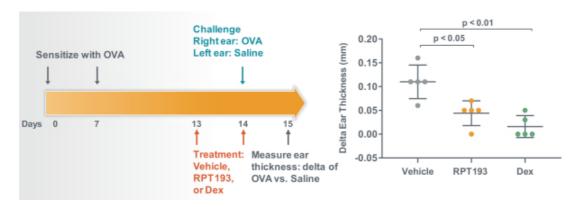
RPT193 has demonstrated the ability to block the migration of mouse and human Th2 cells in vitro and has demonstrated activity in multiple preclinical mouse models of AD and asthma. The observed activity in preclinical mouse models was similar to that of a commercially available antimouse IL-13 antibody, which we believe is representative of the class of biologics such as dupilumab, lebrikizumab and others targeting Th2-derived cytokines such as IL-4, IL-5 and IL-13. We believe that the results observed in these models, individually and in the aggregate, demonstrate the clinical potential to treat a number of Th2-driven diseases along the atopic march in humans.

RPT193 Activity in Preclinical Model of AD

In a mouse model of AD, repeated systemic sensitization to ovalbumin ("OVA") induces a Th2 response leading to increased expression of Th2 cytokines IL-4, IL-5 and IL-13 in the allergen-exposed skin. This leads to broad inflammation, deposition of collagen and skin thickening. Oral treatment of RPT193 in mice that have been sensitized to OVA results in two independent experiments with five mice per experimental arm demonstrated a significant decrease in inflammation, as measured by skin thickness of the allergen-challenged ear. The treatment effect with RPT193 was comparable to the systemic treatment with the corticosteroid dexamethasone ("Dex") which is used as a positive control in these models.

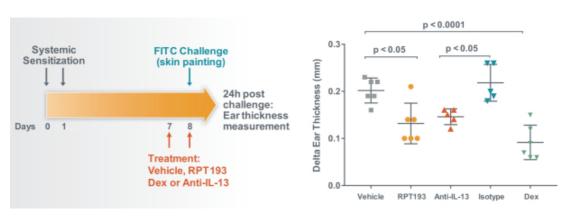
The figure below shows the experimental outline and results as measured by the change in ("delta") ear thickness, determined by the difference in ear thickness between the challenged ear and the unchallenged control ear.

RPT193 Reduces Skin Inflammation in an OVA-Induced AD Model



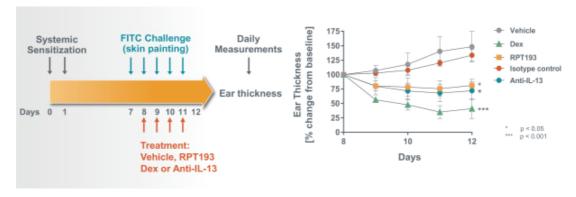
The activity observed with RPT193 was not only seen in the OVA-AD model, but was also seen in an alternative allergen-induced model of AD. In this model, five mice per experimental arm are sensitized using fluorescein isothiocyanate ("FITC"), which induces a strong Th2 cell-mediated response. Sensitized mice are then challenged on the ear with FITC, which leads to inflammation resulting in swelling and is easily measured as ear thickness. In six of six independent experiments, we observed that mice treated with RPT193 one day prior to FITC challenge had a significant reduction in thickness (p < 0.05 with average reduction ranging from 20% to 42% compared to vehicle group). In a head-to-head experiment in this preclinical mouse model, oral RPT193 showed similar activity to a neutralizing anti-IL-13 antibody ("anti-IL13").

RPT193 Reduces Skin Inflammation in a FITC-Induced AD Model



The treatment effect with RPT193 was also observed in a therapeutic model of the Th2-driven FITC AD model. In contrast to the model described above, five to ten mice per experimental arm received treatment 24 hours following the allergen challenge when significant ear inflammation was already observed. Oral administration of RPT193 in three of three independent experiments resulted in a statistically significant reduction in ear thickness compared to treatment control (p < 0.05 with average reduction ranging from 42% to 54%). When comparing to the respective vehicle or isotype control, RPT193 and anti-IL-13 antibody had similar effects (RPT193 vs. anti-IL-13: 45% vs. 46%, 54% vs. 40% and 42% vs. 28% reduction in ear thickness at Day 12 in the three separate experiments). Therefore, the treatment effect was comparable to that observed with the anti-IL-13.

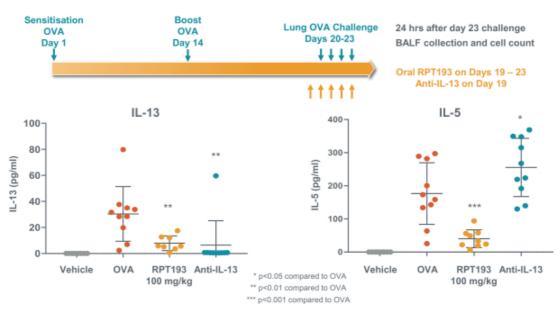
RPT193 Reduces Skin Inflammation in a Therapeutic Th2-Driven AD Model



RPT193 Efficacy in a Preclinical Model of Allergic Asthma

In a mouse model of allergic asthma induced by the allergen OVA, treatment with RPT193 in two independent experiments with ten mice per experimental arm significantly reduced immune cell migration into the lungs and Th2-derived cytokines such as IL-5 and IL-13, which are drivers of the disease as determined by analysis of fluid collected by washing a small portion of the lung. This fluid, called bronchoalveolar lavage fluid ("BALF"), was found to contain dose-dependent decreases in both IL-5 and IL-13. Not unexpectedly, anti-IL-13 had no effect on levels of IL-5 in the BALF. The reduction of the cellular infiltrate and the level of Th2-derived cytokines in the BALF supports the hypothesis that RPT193 was effective in reducing migration of Th2 cells into the lungs as evidenced by lowered overall allergic inflammation.

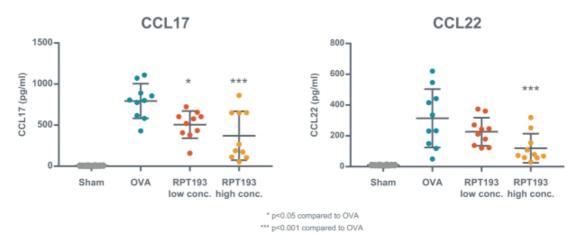
RPT193 Shows Evidence of Broader Activity than Anti-IL-13



RPT193 Reduces Levels of CCL17 and CCL22 in the BALF in a Preclinical Model of Allergic Asthma

In this OVA model of allergic asthma, treatment with RPT193 in two of two independent experiments with ten mice per experimental arm also led to statistically significant decreases in the levels of CCL17 and CCL22 (p<0.05 at high dose of RPT193, 24 hours after challenge), chemokines that are secreted by inflamed cells that serve to recruit Th2 cells. This observation suggests that RPT193 is not only able to directly block Th2 cell recruitment, but that by doing so, the level of overall inflammation is decreased, reducing the secretion of these cytokines and the further recruitment of Th2 cells. Reduction of the CCR4 ligands, CCL17 and CCL22, has also been observed in patients treated with other Th2-targeting approaches, such as dupilumab, demonstrating the clinical relevance of our preclinical findings with RPT193.

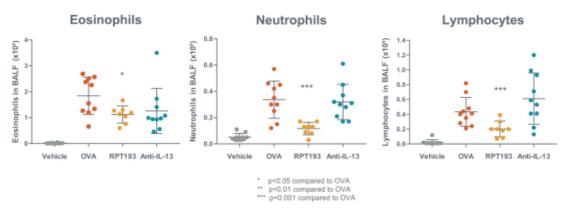
RPT193 Reduces CCR4 Ligands in the BALF



RPT193 Reduces the Immune Cell Infiltrate in the BALF in a Preclinical Model of Allergic Asthma

Treatment of mice in an allergic asthma model with RPT193 in two independent experiments with ten mice per experimental cohort led to reduction in multiple classes of immune cells in the BALF, including eosinophils, neutrophils and lymphocytes. These reductions are all consistent with the broad anti-inflammatory action that RPT193 can induce by blocking Th2 cell migration. This prevents one of the earliest steps in the inflammatory cascade resulting in profound effects on multiple downstream components of the immune system and inflammatory response. The reduction of eosinophils in the BALF was comparable to the anti-IL-13 antibody. However, deeper reduction in neutrophil and lymphocyte counts were observed with RPT193, suggesting a potentially greater impact on the disease compared to other Th2-targeting approaches.

RPT193 Shows Evidence of Broader Activity than Anti-IL-13: Neutrophil and Lymphocytic Infiltration

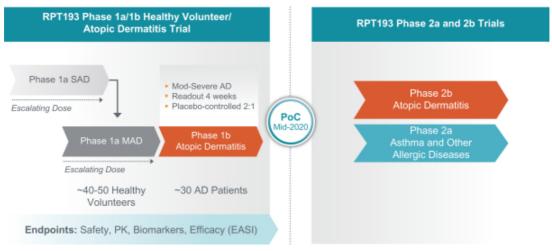


In addition, we believe the overall activity of RPT193 in this OVA-induced asthma model if confirmed in clinical trials, would be competitive with antibodies that target either IL-33 or IL-4Ra reported in the literature. We believe that the ability to achieve this level of activity with an orally available therapy, if confirmed in clinical trials, would represent a significant advantage over biologics, which require regular injections.

RPT193: Clinical Plans

We intend to commence a seamless Phase 1 trial of RPT193 comprised of Phase 1a single and multiple dose escalation ("SAD/MAD") cohorts in healthy volunteers in the second half of 2019, followed by placebo-controlled Phase 1b testing in patients with moderate to severe AD. Our CTA in Europe was accepted in July 2019 and we plan to submit an IND in the United States in the third quarter of 2019 for this Phase 1 trial. We anticipate PoC clinical results from the Phase 1b portion of this study by mid-2020. Thereafter, we intend to expand clinical development into additional Th2-driven allergic indications.

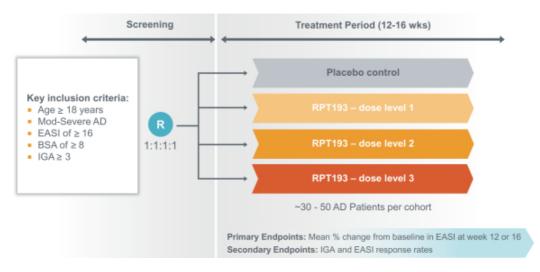
The following graphic outlines the design for our proposed Phase 1a/1b trial and proposed Phase 2a/2b trials.



RPT193: Seamless Clinical Trial Design to PoC

The following graphic outlines the design of our proposed Phase 2b trial in AD to be conducted subsequent to the successful completion of the Phase 1a/1b trial.

RPT193: Future Phase 2b Double-Blind, Placebo-Controlled Trial for AD



BSA = Body Surface Area IGA = Investigator Global Assessment

Our RPT-GCN2i Program

We are developing a small molecule inhibitor of GCN2 as an agent targeting the dysregulated metabolism in the TME that results in immune suppression and consequently in tumor progression. We believe this target has been validated by our proprietary drug discovery and development engine and that inhibition of GCN2 can lead to direct antitumor effects by addressing altered metabolic pathways in tumors as well as relieving the immunosuppressive effects exerted by the TME through nutrient starvation and other stresses such as hypoxia. Preclinical in vitro and in vivo studies have demonstrated that an RPT-GCN2i has the ability to increase T cell proliferation and function in nutrient-deprived conditions, to overcome MDSC-dependent immune suppression, to decrease tumor growth in vitro and to generate antitumor responses in animal tumor models. We are developing an RPT-GCN2i with the intent of filing an IND with the FDA in 2020.

Role of GCN2 in Tumor Cell Proliferation and Immunosuppression

GCN2, or general control nonderepressible 2, is a stress response kinase that regulates the immune system and survival of tumor cells in the TME. Due to the aberrant vasculature of the tumor, the limited blood supply results in a lack of oxygen and deprivation of nutrients, including amino acids. Activation of the GCN2 pathway has been demonstrated in human tumors and importantly, deficiency in GCN2 limits tumor growth in preclinical tumor models. Activation of T cells is highly dependent on the availability of amino acids and other nutrients. GCN2 is a key cellular sensor in T cells for amino acid and glucose starvation. Low levels of amino acids such as tryptophan, arginine and other amino acids lead to activation of GCN2. This triggers a cascade of cell signaling events in T cells leading to the inhibition of effector cell function and growth. GCN2, through this regulatory pathway, prevents effector cells from mounting an immune response when amino acid levels are in limited supply. Inactivation of GCN2 removes this regulatory block and allows effector cell proliferation and activation even under conditions of amino acid starvation similar to what may exist in tumors.

Our Solution, RPT-GCN2i

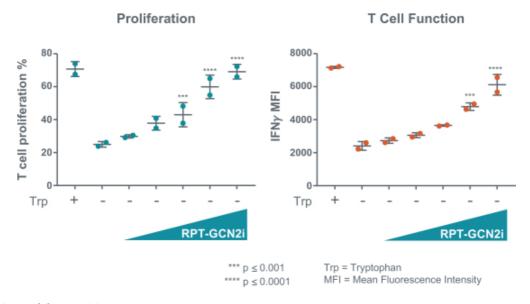
We are developing an RPT-GCN2i with the intent of filing an IND with the FDA in 2020. We believe that the computational analysis of proprietary and public databases will allow us to identify tumor types or a subset of patients with a greater potential to benefit from GCN2 inhibition.

RPT-GCN2i Preclinical Data

An RPT-GCN2i Restores T Cell Proliferation and Function in Amino-Acid-Limited Conditions

Low levels of tryptophan in the TME can be immunosuppressive by blocking the activation and proliferation of effector cells. In six independent cell culture experiments with various human donors, an RPT-GCN2i statistically significantly (p < 0.05) increased effector T cell proliferation and function under nutrient starvation conditions in a dose-dependent manner to levels comparable to T cell proliferation and function in non-nutrient-deprived conditions. The ability of an RPT-GCN2i to recover effector cell proliferation was not limited to a single amino acid or nutrient. We have shown that GCN2 inhibition can relieve the immunosuppressive effects of tryptophan (shown below), arginine and glucose deprivation.

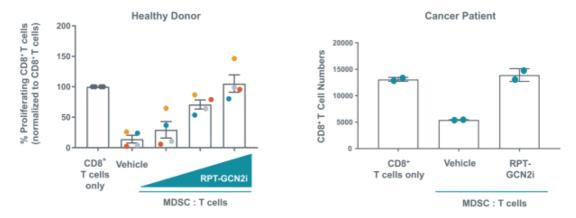
An RPT-GCN2i Restores Human CD8+ T Cell Proliferation and Function Under Conditions of Nutrient Starvation



An RPT-GCN2i Inhibits MDSC Immunosuppressive Function In Vitro

MDSCs are heterogeneous cells found in multiple cancer types that can cause immunosuppression through multiple pathways including the expression of enzymes, such as indoleamine 2,3-dioxygenase that metabolizes tryptophan. Incubation of activated CD8 $^+$ T cells with MDSCs isolated from four healthy volunteers as well as from one cancer patient leads to a statistically significant (p < 0.05) inhibition of T cell proliferation, an effect that is reversed by an RPT-GCN2i in a dose-dependent manner with T cell proliferation comparable to T cells cultured without MDSC (range 80 to 148% of control).

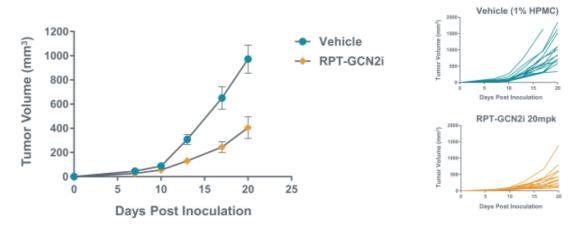
An RPT-GCN2i Reverses Suppressive Function of Healthy Donor and Cancer Patient-Derived MDSCs



An RPT-GCN2i Demonstrates Single Agent Activity in the CT26 Mouse Tumor Model

In a CT26 mouse tumor model, oral administration of an RPT-GCN2i in four independent experiments with ten mice per experimental arm led to a statistically significant (p < 0.05) reductions in tumor volume (at the last day of measurement) when dosed as a single agent. We believe an RPT-GCN2i has the potential to have broad activity in stimulating the immune system in multiple tumor types either as a single agent or in combination with conventional or immune-based therapies.

An RPT-GCN2i Demonstrates Single Agent Activity in a CT26 Mouse Tumor Model



Intellectual Property

We strive to protect the proprietary technology, inventions and improvements that are commercially important to our business, including obtaining, maintaining, enforcing and defending our intellectual property rights, including patent rights, whether developed internally or licensed from third parties. We rely, in part, on trade secrets and know-how relating to our proprietary technology and drug candidates and continuing innovation to develop, strengthen and maintain our proprietary position. We also plan to rely, in part, on data exclusivity, market exclusivity and patent term extensions if and when available. Our commercial success will depend in part

on our ability to obtain and maintain patent and other intellectual property protection for our technology, inventions and improvements; to preserve the confidentiality of our trade secrets; to defend and enforce our proprietary rights, including any patents that we own or may obtain in the future; and to operate without infringing, misappropriating or otherwise violating the valid and enforceable patents and other intellectual property rights of third parties. Intellectual property rights may not address all potential threats to our competitive advantage.

C-C Chemokine Receptor 4 (CCR4) Antagonist Franchise

As of June 30, 2019, our patent portfolio includes five patent families directed to CCR4 inhibiting compounds and their therapeutic uses, one of which is directed to FLX475 and another of which is directed to RPT193, as discussed in more depth below.

FLX475

As of June 30, 2019, with respect to FLX475, we own one issued U.S. patent directed to FLX475 and other related compounds, pharmaceutical compositions comprising the same and therapeutic methods of using the same for the treatment of diseases including cancers, one corresponding pending patent application in the U.S. and 15 corresponding pending patent applications in Australia, Brazil, Canada, China, the European Patent Convention, India, Israel, Japan, South Korea, Mexico, New Zealand, Russia, Singapore, South Africa and Taiwan. Our issued U.S. patent, and any patents that may issue from our pending applications worldwide, are scheduled to expire in 2037, excluding any additional term for patent term adjustment(s) or extension(s), and assuming payment of all applicable maintenance or annuity fees. In addition to the composition of matter patent and patent applications described above, as of June 30, 2019, we own one pending U.S. patent application, one pending Patent Cooperation Treaty ("PCT") patent application and one pending Taiwan patent application directed to the use of CCR4 antagonists generally, including FLX475 specifically, in therapeutic methods of treating EBV positive cancers. Any patents that may issue from these pending applications, in the United States and worldwide, are scheduled to expire in 2038, excluding any additional term for patent term adjustment(s) or extension(s), and assuming national phase entries are timely made based upon the pending PCT application and payment of all applicable maintenance or annuity fees. Our pending PCT patent application is not eligible to become an issued patent until, among other things, we file a national stage patent application(s) within 30 months in the countries in which we seek patent protection. If we do not timely file any national stage patent applications, we may lose our priority date with respect to our PCT patent application and any patent protection on the inventions disclosed in such PCT patent application.

RPT193

As of June 30, 2019, with respect to RPT193, we own one pending U.S. patent application, one pending PCT patent application and one pending Taiwan patent application directed to RPT193 and other related compounds, pharmaceutical compositions comprising the same and therapeutic methods of using the same for the treatment of diseases such as immune, inflammatory, metabolic diseases or cancers. Any patents that may issue from these pending applications, in the United States and worldwide, are scheduled to expire in 2039, excluding any additional term for patent term adjustment(s) or extension(s), and assuming national phase entries are timely made based upon the pending PCT application and payment of all applicable maintenance or annuity fees. Our pending PCT patent application is not eligible to become an issued patent until, among other things, we file a national stage patent application(s) within 30 months in the countries in which we seek patent protection. If we do not timely file any national stage patent applications, we may lose our priority date with respect to our PCT patent application and any patent protection on the inventions disclosed in such PCT patent application.

Our RPT-GCN2i Program

As of June 30, 2019, with respect to RPT-GCN2i product development, we own one pending U.S. provisional patent application, one pending U.S. non-provisional patent application, one pending PCT patent

application and one pending Taiwan patent application, all directed to certain compounds in development, pharmaceutical compositions of the same and therapeutic methods of using the same. Any patents that may issue from these pending patent applications are scheduled to expire in 2039, excluding any additional term for patent term adjustment or extension, and assuming national phase entries are timely made based upon the pending PCT application and payment of all applicable maintenance or annuity fees. Our pending PCT patent application is not eligible to become an issued patent until, among other things, we file a national stage patent application(s) within 30 months in the countries in which we seek patent protection. If we do not timely file any national stage patent applications, we may lose our priority date with respect to our PCT patent application and any patent until, among other things, we file a non-provisional patent application within 12 months of filing the related provisional patent application. If we do not timely file any nonprovisional patent application, we may lose our priority date with respect to our provisional patent application and any patent protection on the inventions disclosed in our provisional patent application.

With respect to our drug candidates, we intend to develop and commercialize in the normal course of business, we intend to pursue patent protection covering, when possible, compositions, methods of use, dosing and formulations. We may also pursue patent protection with respect to manufacturing and drug development processes and technologies. We do not currently own any patents or patent applications relating to our proprietary discovery and development engine. Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies. We may not be able to obtain patent protections for our compositions, methods of use, dosing and formulations, manufacturing and drug development processes and technologies throughout the world. Issued patents can provide protection for varying periods of time, depending upon the date of filing of the patent application, the date of patent issuance and the legal term of patents in the countries in which they are obtained. In general, patents issued for applications filed in the United States expire 20 years after the earliest effective filing date. In addition, in certain instances, the term of an issued U.S. patent that covers or claims an FDA approved product can be extended to recapture a portion of the term effectively lost as a result of the FDA regulatory review period, which is called patent term extension. The restoration period cannot be longer than five years and the total patent term, including the restoration period, must not exceed 14 years following FDA approval. For more information regarding patent term extensions, please see "Business—U.S. Patent Term Restoration and Marketing Exclusivity" below. The term of patents outside of the United States varies in accordance with the laws of the foreign jurisdiction, but typically is also 20 years from the earliest effective filing date. However, the actual protection afforded by a patent varies on a product-by-product basis, from country-to-country, and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country and the validity and enforceability of the patent. The patent term may be inadequate to protect our competitive position on our products for an adequate amount of time. For more information regarding the risks related to our intellectual property, please see "Risk Factors—Risks Related to Our Intellectual Property."

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. No consistent policy regarding the scope of claims allowable in patents in the field of biopharmaceuticals has emerged in the United States. The relevant patent laws and their interpretation outside of the United States is also uncertain. Changes in either the patent laws or their interpretation in the United States and other countries may diminish our ability to protect our technology or drug candidates and could affect the value of such intellectual property. In particular, our ability to stop third parties from making, using, selling, offering to sell or importing products that infringe our intellectual property will depend in part on our success in obtaining, maintaining, enforcing and defending patent claims that cover our technology, inventions and improvements. We cannot guarantee that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications we may file in the future, nor can we ensure that any patents that may be granted to us in the future will be commercially useful in protecting our products, the methods of use or manufacture of those products. Moreover, any issued patents we obtain do not guarantee us the right to practice our technology in relation to the commercialization of our products. Patent and other intellectual

property rights in the pharmaceutical and biotechnology space are evolving and involve many risks and uncertainties. For example, third parties may have blocking patents that could be used to prevent us from commercializing our drug candidates and practicing our proprietary technology, and our patent rights may be challenged, invalidated or circumvented, which could limit our ability to stop competitors from marketing related products or could limit the term of patent protection that otherwise may exist for our drug candidates. In addition, the scope of the rights granted under any issued patent that we own or license, now or in the future, may not provide us with protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies that are outside the scope of the rights granted under any issued patents we obtain. For these reasons, we may face competition with respect to our drug candidates. Moreover, because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any particular drug candidate can be commercialized, any patent protection for such product may expire or remain in force for only a short period following commercialization, thereby reducing the commercial advantage the patent provides.

In addition to patent protection, we rely upon unpatented trade secrets and confidential know-how and continuing technological innovation to develop and maintain our competitive position. However, trade secrets and confidential information are difficult to protect. We seek to protect our proprietary information, in part, using confidentiality agreements with any future collaborators, scientific advisors, employees and consultants, and invention assignment agreement with our employees. We also have agreements requiring assignment of inventions with selected consultants, scientific advisors and collaborators. These agreements may not provide meaningful protection. These agreements may also be breached, and we may not have an adequate remedy for any such breach. In addition, our trade secrets and/or confidential know-how may become known or be independently developed by a third party, or misused by any collaborator to whom we disclose such information. Despite any measures taken to protect our intellectual property, unauthorized parties may attempt to copy aspects of our products or drug candidates or obtain or use information that we regard as proprietary. Although we take steps to protect our proprietary information, third parties may independently develop the same or similar proprietary information or may otherwise gain access to our proprietary information. As a result, we may be unable to meaningfully protect our trade secrets and proprietary information. For more information regarding the risks related to our intellectual property, please see "Risk Factors—Risks Related to Our Intellectual Property."

Clinical Trial Collaboration and Supply Agreement

In November 2018, we entered into a clinical trial collaboration and supply agreement with MSD International GmbH, an affiliate of Merck (known as MSD outside the United States and Canada), under which we will conduct a clinical trial evaluating FLX475 as a monotherapy and in combination with KEYTRUDA® (pembrolizumab), Merck's anti-PD-1 therapy, in patients with advanced cancers. We are the sponsor of the clinical trial and are responsible for the costs of conducting it, and Merck will supply KEYTRUDA® for use in the clinical trial at no charge to us except that we may be required to reimburse Merck's manufacturing costs upon certain early termination events. Neither party will have any other obligations to reimburse any costs or expenses incurred by the other party. We retain ownership of the quantities of FLX475 used in the clinical trial and we will own the quantities of KEYTRUDA® supplied to us by Merck for use in the clinical trial. The agreement provides for joint ownership of any inventions, clinical data and results generated in the clinical trial that relate solely to KEYTRUDA® and all data resulting from testing performed by or on behalf of Merck upon samples collected during the clinical trial. We will solely own any inventions generated in the clinical trial that relate solely to FLX475, clinical data resulting from the use of FLX475 as a monotherapy, and from all data resulting from testing performed by or on behalf of us upon samples collected during the clinical trial. The term of the agreement will continue until delivery of the final report for the clinical trial, provided that either party may terminate the agreement due to the other party's uncured material breach, a violation of anti-corruption obligations, patient safety concerns, regulatory action that prevents supply of such party's compound, or such party's termination of its compound's development or withdrawal of its compound's regulatory approval. Merck

may also terminate the agreement if we fail to make any changes to the clinical trial protocol regarding the use of KEYTRUDA® that are reasonably requested by Merck to address any concern raised by Merck that KEYTRUDA® is being used in the clinical trial in an unsafe manner.

Competition

The biotechnology and pharmaceutical industries, including the oncology and inflammatory disease fields, are characterized by rapidly advancing technologies, strong competition and an emphasis on intellectual property protection. We face substantial competition from many different sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions, governmental agencies and public and private research institutions. We believe that the key competitive factors affecting the success of any of our drug candidates will include patient selection strategies, efficacy (single and combination strategies), safety profile, method of administration, cost, level of promotional activity and intellectual property protection.

If approved, FLX475 will compete with current therapies approved for the treatment of cancer, particularly immuno-oncology. Potential immuno-oncology therapeutics are being developed or marketed by many large and specialty pharmaceutical and biotechnology companies such as Merck, Bristol-Myers Squibb, Novartis, AstraZeneca, Pfizer and Roche/Genentech. Additionally, there is one approved CCR4-targeting T_{reg} -depleting antibody, mogamulizumab developed by Kyowa Hakko Kirin, as well as other T_{reg} -targeting agents currently in early development by companies such as ChemoCentryx, T_{reg} -targeting agents currently in early development by companies such as ChemoCentryx, T_{reg} -targeting agents currently in early development by companies such as ChemoCentryx, T_{reg} -targeting agents currently in early development by companies such as ChemoCentryx, T_{reg} -targeting agents currently in early development by companies such as ChemoCentryx, T_{reg} -targeting agents currently in early development by companies such as ChemoCentryx, T_{reg} -targeting agents currently in early development by companies such as ChemoCentryx, T_{reg} -targeting agents currently in early development by companies and T_{reg} -targeting agents currently in early development by companies and T_{reg} -targeting agents currently in early development by companies and T_{reg} -targeting agents currently in early development by T_{reg} -targeting T_{reg} -

RPT193 is a CCR4 antagonist intended to treat allergic disease, including AD and other diseases along the atopic march. If approved for AD, we will face branded competition from dupilumab (marketed by Regeneron Pharmaceuticals, Inc. and Sanofi S.A. as Dupixent), a biologic recently approved. In addition, there are several companies developing treatments that may be approved for AD, including large pharmaceutical and biotechnology companies such as Pfizer, Lilly/Incyte, AbbVie, AnaptysBio, Dermira and Amgen/AstraZeneca.

There are several large and specialty pharmaceutical companies, as well as biotechnology companies with marketed or late stage assets targeting the Th2 pathway along the atopic march, which includes Amgen, AstraZeneca, Chiesi Farmaceutici, GSK, Novartis, Roche, Sanofi and Teva Pharmaceuticals.

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 trials sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

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, quality control, import, export, safety, effectiveness, labeling, packaging, storage, distribution, record keeping, approval, advertising, promotion, marketing, post-approval monitoring, and post-approval reporting of drug products such as those we are developing. We, along with third-party contractors, will be required to navigate the various preclinical, clinical and commercial approval requirements of the governing regulatory agencies of the countries in which we wish to conduct studies or seek approval or licensure of our drug candidates.

The process required by the FDA before drug candidates may be marketed in the United States generally involves the following:

• completion of preclinical laboratory tests and animal studies performed in accordance with the FDA's current Good Laboratory Practices ("GLP"), regulation;

- submission to the FDA of an IND, which must become effective before clinical trials may begin and must be updated annually or when significant changes are made;
- approval by an independent Institutional Review Board ("IRB"), or ethics committee at each clinical site before the trial is commenced;
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed drug candidate for its intended purpose;
- preparation of and submission to the FDA of an NDA after completion of all pivotal clinical trials;
- satisfactory completion of an FDA Advisory Committee review, if applicable;
- 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 pre-approval inspection of the manufacturing facility or facilities at which the proposed product is
 produced to assess compliance with cGMP, and of selected clinical investigation sites to assess compliance with Good Clinical
 Practices ("GCP"); and
- FDA review and approval of the NDA to permit commercial marketing of the product for particular indications for use in the United States.

Preclinical and Clinical Development

Prior to beginning the first clinical trial with a drug candidate, we must submit an IND to the FDA. An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for clinical trials. The IND also includes results of animal and in vitro studies assessing the toxicology, pharmacokinetics, pharmacology, and pharmacodynamic characteristics of the product; chemistry, manufacturing, and controls information; and any available human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises safety concerns or questions about the proposed clinical trial. 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 the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial.

Clinical trials involve the administration of the investigational product 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 their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. Furthermore, an independent IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site, and must monitor the study until completed. Regulatory authorities, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. There are also requirements governing the reporting of ongoing clinical trials and clinical trial results to public registries.

For purposes of NDA approval, human clinical trials are typically conducted in three sequential phases that may overlap.

- Phase 1—The investigational product is initially introduced into healthy human subjects or patients with the target disease or condition.
 These studies are designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.
- *Phase 2*—The investigational product is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials. Some trials may combine aspects of Phase 1 and Phase 2 into a single clinical trial, which we refer to as a "seamless" study that can examine both safety in healthy volunteers and safety and preliminary efficacy in patients with a specific disease.
- Phase 3—The investigational product is administered to an expanded patient population to further evaluate dosage, to provide
 statistically significant evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical
 trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an
 adequate basis for product approval.

A registrational trial is a clinical trial that adequately meets regulatory agency requirements for the evaluation of a drug candidate's efficacy and safety such that it can be used to justify the approval of the drug. Generally, registrational trials are Phase 3 trials but may be Phase 2 trials if the trial design provides a reliable assessment of clinical benefit, particularly in situations where there is an unmet medical need.

In some cases, the FDA may require, or companies may voluntarily pursue, additional clinical trials after a product is approved to gain more information about the product. These so-called Phase 4 studies may be made a condition to approval of the NDA. Concurrent with clinical trials, companies may complete additional animal studies and develop additional information about the characteristics of the drug candidate, and must finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, must develop methods for testing the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

NDA Submission and Review

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, nonclinical studies and clinical trials are submitted to the FDA as part of an NDA requesting approval to market the product for one or more indications. The NDA must include all relevant data available from pertinent preclinical and clinical trials, 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. A determination by the FDA within 60 days of the receipt of an NDA to file the application for review for its completeness is initiated at the time of submission. If the FDA determines there is significance to the missing or incomplete information in the context of the proposed drug product, the proposed indication(s), and the amount of time needed to address any given deficiency, it can issue a refusal-to-file letter. The submission of an NDA requires payment of a substantial application user fee to FDA, unless a waiver or exemption applies.

Once an NDA has been submitted, the FDA's goal is to review standard applications within ten months after it accepts the application for filing, or, if the application qualifies for priority review, six months after the

FDA accepts the application for filing. In both standard and priority reviews, the review process is often significantly extended by FDA requests for additional information or clarification. The FDA reviews an NDA to determine, among other things, whether a product is safe and effective. The FDA may convene an advisory committee to provide clinical insight on application review questions. Before approving an NDA, the FDA will typically 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, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

After the FDA evaluates an NDA and conducts inspections of manufacturing facilities where the product will be produced, the FDA may issue an approval letter or a Complete Response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A Complete Response letter will describe all of the deficiencies that the FDA has identified in the NDA. In issuing the Complete Response letter, the FDA may recommend actions that the applicant might take to place the NDA in condition for approval, including requests for additional information or clarification. The FDA may delay or refuse approval of an NDA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product.

If regulatory approval of a product is granted, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the NDA with a Risk Evaluation and Mitigation Strategy ("REMS"), to ensure the benefits of the product outweigh its risks. A REMS is a safety strategy to manage a known or potential serious risk associated with a product and to enable patients to have continued access to such medicines by managing their safe use, and could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing requirements is not maintained or if problems occur after the product reaches the marketplace. The FDA may require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization, and may limit further marketing of the product based on the results of these post-marketing studies.

Expedited Development and Review Programs

The FDA offers a number of expedited development and review programs for qualifying drug candidates. The fast track program is intended to expedite or facilitate the process for reviewing new products that meet certain criteria. Specifically, new 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.

Any 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. For products containing new molecular entities, priority review designation means the FDA's goal is to take action on the marketing application within six months of the 60-day filing date (compared with ten 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 trials 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

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic 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 or biologic for this type of disease or condition will be recovered from sales in the United States for that drug or biologic. 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 or biologic for the same disease or condition, or the same drug or biologic 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.

Post-Approval Requirements

Any products manufactured or distributed by us pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping,

reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. 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. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. 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 if compliance with regulatory requirements and standards 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 trials to assess new safety risks; or imposition of distribution restrictions or other restrictions under an 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 letters or holds on post-approval clinical trials;
- 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 closely regulates the marketing, labeling, advertising and promotion of biologics and drugs. A company can make only those claims relating to safety and efficacy, purity and potency that are approved by the FDA 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. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products.

FDA Regulation of Companion Diagnostics

A therapeutic product may rely upon an in vitro companion diagnostic for use in selecting the patients that will be more likely to respond to that therapy. If an in vitro diagnostic is essential to the safe and effective use of the therapeutic product, then the FDA generally will require approval or clearance of the diagnostic at the

same time that the FDA approves the therapeutic product. According to FDA guidance, a companion diagnostic device used to make treatment decisions in clinical trials of a drug generally will be considered an investigational device unless it is employed for an intended use for which the device is already approved or cleared. If used to make critical treatment decisions, such as patient selection, the diagnostic device generally will be considered a significant risk device under the FDA's Investigational Device Exemption ("IDE"), regulations. Thus, the sponsor of the diagnostic device will be required to comply with the IDE regulations. According to the guidance, if a diagnostic device and a drug are to be studied together to support their respective approvals, both products can be studied in the same investigational trial, if the trial meets both the requirements of the IDE regulations and the IND regulations. The guidance provides that depending on the details of the trial plan and subjects, a sponsor may seek to submit an IND alone, or both an IND and an IDE.

Pursuing FDA approval of an in vitro companion diagnostic would require either a pre-market notification, also called 510(k) clearance, or a pre-market approval ("PMA"), for that diagnostic. The review of companion diagnostics involves coordination of review with the FDA's Center for Devices and Radiological Health.

The PMA process, including the gathering of clinical and nonclinical data and the submission to and review by the FDA, can take several years or longer. The applicant must prepare and provide the FDA with reasonable assurance of the device's safety and effectiveness, including information about the device and its components regarding, among other things, device design, manufacturing and labeling. PMA applications are subject to an application fee. In addition, PMAs for devices must generally include the results from extensive preclinical and adequate and well-controlled clinical trials to establish the safety and effectiveness of the device for each indication for which FDA approval is sought. In particular, for a diagnostic, the applicant must demonstrate that the diagnostic produces reproducible results. As part of the PMA review, the FDA will typically inspect the manufacturer's facilities for compliance with the Quality System Regulation ("QSR"), which imposes elaborate testing, control, documentation and other quality assurance requirements.

U.S. Patent Term Restoration and Marketing Exclusivity

The term of a patent depends upon the laws of the country in which it is issued. In most jurisdictions, a patent term is 20 years from the earliest filing date of a non-provisional patent application. Depending upon the timing, duration and specifics of the FDA approval of our drug candidates, one or more issued U.S. patents we obtain may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit a patent restoration term of up to five years beyond the normal expiration of the patent, limited to the approved indication (or any additional indications approved during the period of extension), as compensation for patent term lost during the FDA regulatory review process. The patent term restoration period granted on a patent covering a product is generally one-half the time between the effective date of an IND and the submission date of an NDA, plus the time between the submission date of an NDA and the ultimate approval date of that application. However, patent term restoration cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. Only one patent applicable to an approved product is eligible for extension and only those claims covering the approved product, a method for using it, or a method for manufacturing it may be extended. Additionally, the application for the extension must be submitted prior to the expiration of the patent in question. A patent that covers multiple products for which approval is sought can only be extended in connection with one of the approvals. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we intend to apply for restoration of patent term for an issued patent we own, and if eligible for such restoration, to add patent term beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA. There can be no assurance that any of our pending patent applications will be issued or that we will benefit from any patent term extension.

Marketing exclusivity provisions under the United States Federal Food, Drug, and Cosmetic Act ("FDCA") can also delay the submission or the approval of certain marketing applications for competing

products. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application ("ANDA"), or a 505(b)(2) NDA submitted by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovator drug or for another indication. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder. The FDCA also provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA, if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505(b)(2) applications for drugs containing the active agent for the original indication or condition of use. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness. Orphan drug exclusivity, as described below, may offer a seven-year period of marketing exclusivity, except in certain circumstances. Pediatric exclusivity is another type of regulatory 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 trial in accordance with an FDA-issued "Written Request" for such a trial.

European Drug Development

In Europe, our future drugs may also be subject to extensive regulatory requirements. As in the United States, medicinal products can only be marketed if a marketing authorization from the competent regulatory agencies has been obtained.

Similar to the United States, the various phases of preclinical and clinical research in Europe are subject to significant regulatory controls. Although the EU Clinical Trials Directive 2001/20/EC has sought to harmonize the European Union clinical trials regulatory framework, setting out common rules for the control and authorization of clinical trials in the European Union, the European Union Member States have transposed and applied the provisions of the Directive differently. This has led to significant variations in the member state regimes. Under the current regime, before a clinical trial can be initiated it must be approved in each of the European Union countries where the trial is to be conducted by two distinct bodies: the National Competent Authority ("NCA"), and one or more Ethics Committees ("ECs"). Under the current regime, all suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial have to be reported to the NCA and ECs of the Member State where they occurred.

In 2014, a new Clinical Trials Regulation 536/2014, replacing the current Directive, was adopted. The new Regulation will become directly applicable in all EU Member States (without national implementation) once the EU Portal and Database are fully functional. It is expected that the Regulation will apply in 2019. The new Regulation seeks to simplify and streamline the approval of clinical trials in the European Union. For example, the sponsor shall submit a single application for approval of a clinical trial via the EU Portal. As part of the application process, the sponsor shall propose a reporting Member State, who will coordinate the validation and evaluation of the application. The reporting Member State shall consult and coordinate with the other concerned Member States. If an application is rejected, it can be amended and resubmitted through the EU Portal. If an approval is issued, the sponsor can start the clinical trial in all concerned Member States. However, a concerned Member State can in limited circumstances declare an "opt-out" from an approval. In such a case, the clinical trial cannot be conducted in that Member State. The Regulation also aims to streamline and simplify the rules on

safety reporting and introduces enhanced transparency requirements such as mandatory submission of a summary of the clinical trial results to the EU Database.

European Drug Review and Approval

In the European Economic Area ("EEA"), which is comprised of the 28 Member States of the European Union plus Norway, Iceland and Liechtenstein, medicinal products can only be commercialized after obtaining a Marketing Authorization ("MA"). There are two types of marketing authorizations.

The Community MA, which is issued by the European Commission through the Centralized Procedure, based on the opinion of the Committee for Medicinal Products for Human Use ("CHMP"), of the EMA and which is valid throughout the entire territory of the EEA. The Centralized Procedure is mandatory for certain types of drugs, such as biotechnology medicinal drugs, orphan medicinal drugs, and medicinal drugs containing a new active substance indicated for the treatment of AIDS, cancer, neurodegenerative disorders, diabetes, autoimmune and viral diseases. The Centralized Procedure is optional for drugs containing a new active substance not yet authorized in the EEA, or for drugs that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the European Union.

National MAs, which are issued by the competent authorities of the Member States of the EEA and only cover their respective territory, are available for drugs not falling within the mandatory scope of the Centralized Procedure. Where a drug has already been authorized for marketing in a Member State of the EEA, this National MA can be recognized in other Member States through the Mutual Recognition Procedure. If the drug has not received a National MA in any Member State at the time of application, it can be approved simultaneously in various Member States through the Decentralized Procedure. Under the Decentralized Procedure, an identical dossier is submitted to the competent authorities of each of the Member States in which the MA is sought, one of which is selected by the applicant as the Reference Member State ("RMS"). The competent authority of the RMS prepares a draft assessment report, a draft summary of the drug characteristics ("SPC"), and a draft of the labeling and package leaflet, which are sent to the other Member States ("Member States Concerned") for their approval. If the Member States Concerned raise no objections, based on a potential serious risk to public health, to the assessment, SPC, labeling, or packaging proposed by the RMS, the drug is subsequently granted a national MA in all the Member States (i.e. in the RMS and the Member States Concerned).

Under the above-described procedures, before granting the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the drug on the basis of scientific criteria concerning its quality, safety and efficacy.

European Chemical Entity Exclusivity

In Europe, new chemical entities, sometimes referred to as new active substances, qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. This data exclusivity, if granted, prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic application for eight years, after which generic marketing authorization can be submitted, and the innovator's data may be referenced, but not approved for two years. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies.

European Union General Data Protection Regulation

In addition to EU regulations related to the approval and commercialization of our products, we may be subject to the EU's General Data Protection Regulation ("GDPR"). The GDPR went into effect on May 25, 2018.

The GDPR introduced new data protection requirements in the European Union, as well as potential fines for noncompliant companies of up to the greater of €20 million or 4% of annual global revenue. The regulation imposes numerous new requirements for the collection, use, storage and disclosure of personal information, including more stringent requirements relating to consent and the information that must be shared with data subjects about how their personal information is used, the obligation to notify regulators and affected individuals of personal data breaches, extensive new internal privacy governance obligations and obligations to honor expanded rights of individuals in relation to their personal information (e.g., the right to access, correct and delete their data). In addition, the GDPR includes restrictions on cross-border data transfers. The GDPR increased our responsibility and liability in relation to personal data that we process, and we may be required to put in place additional mechanisms to ensure compliance with the new EU data protection rules. Further, the United Kingdom's vote in favor of exiting the EU, often referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, it is unclear whether the United Kingdom will enact data protection legislation equivalent to the GDPR and how data transfers to and from the United Kingdom will be regulated.

Rest of the World Regulation

For other countries outside of the European Union and the United States, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, drug licensing, pricing and reimbursement vary from country to country. In all cases the clinical trials must be conducted in accordance with GCP requirements and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Coverage and Reimbursement

Sales of our drugs will depend, in part, on the extent to which our drugs will be covered by third-party payors, such as government health programs, commercial insurance and managed healthcare organizations. These third-party payors are increasingly reducing reimbursements for medical drugs and services. Additionally, the containment of healthcare costs has become a priority of federal and state governments, and the prices of drugs have been a focus in this effort. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic drugs.

There may be significant delays in obtaining coverage and reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA or similar regulatory authorities outside of the United States. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, intellectual property protection, manufacture, sale and distribution expenses. 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, but also have their own methods and approval process apart from Medicare determinations.

We plan to develop, either by ourselves or with collaborators, in vitro companion diagnostic tests for our drug candidates for certain indications. We, or our collaborators, will be required to obtain coverage and reimbursement for these tests separate and apart from the coverage and reimbursement we seek for our drug candidates, once approved.

In addition, in some foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal drugs for which their national health insurance systems provide reimbursement and to control the prices of medicinal drugs for human use. A member state may approve a specific price for the medicinal drug or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal drug on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical drugs will allow favorable reimbursement and pricing arrangements for any of our drugs. Historically, drugs launched in the European Union do not follow price structures of the United States and generally tend to be significantly lower.

Healthcare Reform

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of drug candidates, restrict or regulate post-approval activities and affect a biopharmaceutical company's ability to profitably sell any approved drugs.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 ("MMA") established the Medicare Part D program to provide a voluntary prescription drug benefit to Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities that provide coverage of outpatient prescription drugs. Unlike Medicare Parts A and B, Part D coverage is not standardized. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Any formulary used by a Part D prescription drug plan must be developed and reviewed by a pharmacy and therapeutic committee. Government payment for some of the costs of prescription drugs may increase demand for drugs for which we obtain marketing approval. However, any negotiated prices for our drugs covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private third-party payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from non-governmental third-party payors.

The American Recovery and Reinvestment Act of 2009 provides funding for the federal government to compare the effectiveness of different treatments for the same illness. The plan for the research was published in 2012 by the U.S. Department of Health and Human Services ("HHS"), the Agency for Healthcare Research and Quality and the National Institutes for Health, and periodic reports on the status of the research and related expenditures are made to Congress. Although the results of the comparative effectiveness studies are not intended to mandate coverage policies for public or private third-party payors, it is not clear what effect, if any, the research will have on the sales of our drug candidates, if any such drug or the condition that they are intended to treat are the subject of a trial. It is also possible that comparative effectiveness research demonstrating benefits in a competitor's drug could adversely affect the sales of our drug candidate. If third-party payors do not consider our drugs to be cost-effective compared to other available therapies, they may not cover our drugs after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our drugs on a profitable basis.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 ("ACA") enacted in March 2010, has had a significant impact on the healthcare industry. The ACA expanded coverage for the uninsured while at the same time containing overall healthcare costs. With regard to pharmaceutical products, the ACA, among other things, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extended the rebate program to individuals enrolled in Medicaid managed care organizations, established annual fees and taxes on manufacturers of certain branded prescription drugs, and a new Medicare Part D coverage gap discount program, in which manufacturers must now 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 recent efforts by the current U.S. President's administration to repeal or replace certain aspects of the ACA. Since January 2017, the current U.S. President has signed two Executive Orders and other directives 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, it has enacted laws that modify certain provisions of the ACA such as removing penalties, starting January 1, 2019, for not complying with the ACA's individual mandate to carry health insurance, delaying the implementation of certain ACA-mandated fees, and increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D. On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas (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 District Court Judge, as well as the current U.S. President's administration and the Centers for Medicare & Medicaid Services ("CMS"), have stated that the ruling will have no immediate effect, it is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the ACA will impact the ACA.

In addition, 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, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, started in April 2013, and, due to subsequent legislative amendments, will stay in effect through 2027 unless additional congressional action is taken. On January 2, 2013, the then-U.S. President signed into law the American Taxpayer Relief Act of 2012 ("ATRA"), which, among other things, also reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Further, there has been heightened governmental scrutiny recently over the manner in which drug manufacturers set prices for their marketed products, which has resulted in several congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. For example, the current U.S. President's administration released a "Blueprint" to lower drug prices and reduce out-of-pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out-of-pocket costs of drug products paid by consumers. For example, in October 2018, CMS proposed a new rule that

would require direct-to-consumer television advertisements of prescription drugs and biological products, for which payment is available through or under Medicare or Medicaid, to include in the advertisement the Wholesale Acquisition Cost, or list price, of that drug or biological product. On January 31, 2019, the HHS Office of Inspector General, proposed modifications to the federal Anti-Kickback Statute discount safe harbor for the purpose of reducing the cost of drug products to consumers which, among other things, if finalized, will affect discounts paid by manufacturers to Medicare Part D plans, Medicaid managed care organizations and pharmacy benefit managers working with these organizations. Although some of these and other proposed measures may require additional authorization to become effective, Congress and the current U.S. President's administration has each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs.

Additionally, on May 30, 2018, the Trickett Wendler, Frank Mongiello, Jordan McLinn, and Matthew Bellina Right to Try Act of 2017 ("Right to Try Act") was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational new drug products that have completed a Phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under the FDA expanded access program. There is no obligation for a pharmaceutical manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act.

Other Healthcare Laws

We may also be subject to healthcare regulation and enforcement by the federal government and the states and foreign governments where we may market our drug candidates, if approved. These laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security and physician sunshine laws and regulations.

The federal Anti-Kickback Statute prohibits, among other things, any person from knowingly and willfully offering, soliciting, receiving or paying remuneration, directly or indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs such as the Medicare and Medicaid programs. The federal Anti-Kickback Statute is subject to evolving interpretations. In the past, the government has enforced the federal Anti-Kickback Statute to reach large settlements with healthcare companies based on sham consulting and other financial arrangements with physicians. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. 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 False Claims Act. The majority of states also have anti-kickback laws, which establish similar prohibitions and in some cases may apply to items or services reimbursed by any third-party payor, including commercial insurers.

Additionally, the federal civil and criminal false claims laws, including the False Claims Act, and civil monetary penalties law, prohibits knowingly presenting or causing the presentation of a false, fictitious or fraudulent claim for payment to the U.S. government. Actions under the False Claims Act may be brought by the Attorney General or as a qui tam action by a private individual in the name of the government. The federal government is using the False Claims Act, and the accompanying threat of significant liability, in its investigation and prosecution of pharmaceutical and biotechnology companies throughout the United States, for example, in connection with the promotion of products for unapproved uses and other sales and marketing practices. The government has obtained multi-million and multi-billion dollar settlements under the False Claims Act in addition to individual criminal convictions under applicable criminal statutes. Given the significant size of actual and potential settlements, it is expected that the government will continue to devote substantial resources to investigating healthcare providers' and manufacturers' compliance with applicable fraud and abuse laws.

The federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA") also created additional federal civil and criminal penalties for, among other actions, knowingly and willfully executing, or

attempting to execute, a scheme to defraud any healthcare benefit program, including private third-party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

There has also been a recent trend of increased federal and state regulation of payments made to physicians and other healthcare providers. The ACA, through the Physician Payments Sunshine Act, imposes new reporting requirements on drug manufacturers for payments made by them to physicians and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Drug manufacturers are required to submit annual reports to the government and these reports are posted on a website maintained by CMS. Certain states also mandate implementation of compliance programs, impose restrictions on drug manufacturer marketing practices and/or require the tracking and reporting of gifts, compensation and other remuneration to physicians.

We may also be subject to data privacy and security requirements that may impact the way in which we conduct research and operate our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act ("HITECH"), and their respective implementing regulations, including the final omnibus rule published on January 25, 2013, impose obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information on covered entities, including certain healthcare providers, health plans, and healthcare clearinghouses, as well as individuals and entities that provide services on behalf of a covered entity that involve individually identifiable health information, known as business associates. In addition, we may be directly subject to certain state laws concerning data privacy and security. For example, California recently enacted the California Consumer Privacy Act ("CPPA"), which creates new individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling certain personal data of consumers or households. The CCPA will require covered companies to provide new disclosure to consumers about such companies' data collection, use and sharing practices, provide such consumers new ways to opt-out of certain sales or transfers of personal information, and provide consumers with additional causes of action. The CCPA goes into effect on January 1, 2020, and the California Attorney General may bring enforcement actions for violations beginning July 1, 2020. The CCPA was amended on September 23, 2018, and it remains unclear what, if any, further modifications will be made to this legislation or how it will be interpreted. As currently written, the CCPA may impact our business activities and exemplifies the vulnerability of our business to the evolving regulatory environment related to personal data and protected health information. Existing state laws governing the privacy and security of personally identifiable information, and, in some states, health information, impose differing requirements, thus complicating our compliance efforts.

Legal Proceedings

From time to time, we are involved in various legal proceedings arising from the normal course of business activities. We are not presently a party to any litigation the outcome of which, we believe, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, cash flows, or financial condition. Defending such proceedings is costly and can impose a significant burden on management and employees, we may receive unfavorable preliminary or interim rulings in the course of litigation, and there can be no assurances that favorable final outcomes will be obtained.

Our Employees

As of June 30, 2019, we had 62 full-time employees, with 51 in research and development and eleven in general and administrative functions. As of June 30, 2019, 27 of our full-time employees had completed a Ph.D. or other advanced science or medical degree.

None of our employees is represented by a labor union or covered by collective bargaining agreements, and we have not experienced any work stoppages. We consider our relations with our employees to be good.

Our Facilities

Our corporate headquarters are located in South San Francisco, California, and comprise approximately 36,754 square feet of space, pursuant to an operating lease that expires in November 2026. This lease includes an option to extend for a further eight years, at market rates that prevail at the time of our election to extend.

We believe that these facilities are sufficient to meet our current needs. We also believe we will be able to obtain additional space, as needed, on commercially reasonable terms.

MANAGEMENT

The following table sets forth information for our executive officers and directors as of June 30, 2019:

Name Executive Officers	Age	<u>Position</u>
Executive Officers	457	D 'I CI' (D ' O'' ID'
Brian Wong, M.D., Ph.D.	47	President, Chief Executive Officer and Director
William Ho, M.D., Ph.D.	53	Chief Medical Officer
Dirk Brockstedt, Ph.D.	50	Chief Scientific Officer
Eric Hall, CFA	64	Interim Chief Financial Officer and Secretary
Key Employees		
David Wustrow, Ph.D.	60	Senior Vice President, Drug Discovery and Preclinical Development
Paul Kassner, Ph.D.	53	Vice President, Quantitative and Computational Biology
Karen C. Lam	45	Vice President, Finance and Corporate Controller
Erin Campany	52	Vice President, Human Resources
Non-Employee Directors		
William Rieflin(1)(2)	59	Chair of the Board of Directors
Michael F. Giordano, M.D.(1)(2)(3)	61	Director
David V. Goeddel, Ph.D.	68	Director
Linda Kozick(1)(3)	61	Director

- (1) Member of the audit committee.
- (2) Member of the compensation committee.
- (3) Member of the nominating and corporate governance committee.

Executive Officers

Brian Wong, M.D., Ph.D. has served as a member of our board of directors and as our Chief Executive Officer since August 2015 and as our President since June 2019. From January 2009 to August 2015, he served as Vice President of Immunology and Discovery Research and most recently as Senior Vice President, Research and Head of Immuno-Oncology at Five Prime Therapeutics, Inc., a biopharmaceutical company. From 2005 to 2009, he served as Director of Research in the Inflammation Disease Biology Area at F. Hoffmann-La Roche Ltd., a pharmaceutical company. Dr. Wong received an M.D. from Weill Cornell Medical College and a Ph.D. in Immunology from Rockefeller University. Dr. Wong obtained a B.A. in Chemistry and Biochemistry from Oberlin College. We believe that Dr. Wong's extensive experience in the life sciences industry and his medical and scientific training provide him with the qualifications and skills to serve on our board of directors and as our President and Chief Executive Officer.

William Ho, M.D., Ph.D. has served as our Chief Medical Officer since May 2015. From October 2012 to June 2016, he served as the Vice President of Clinical Development at Igenica Biotherapeutics, Inc., a pharmaceutical company. From September 2005 to September 2012, he served in several positions up to Senior Medical Director in the Exploratory Clinical Development (BioOncology) group at Genentech, Inc., a biotechnology company. Dr. Ho completed his internship and residency in Internal Medicine at the University of California, San Francisco, and received his fellowship training in Medical Oncology at the University of Washington and Fred Hutchinson Cancer Research Center. Dr. Ho received an M.D. and a Ph.D. in Microbiology and Immunology from Stanford University and an A.B. in Molecular Biology from Princeton University.

Dirk Brockstedt, Ph.D. has served as our Chief Scientific Officer since June 2019. Prior to that he served as our Senior Vice President, Biology from January 2018 to June 2019. Since October 2017, he has also served as Executive in Residence at ShangPharma Innovation Inc., a healthcare investment company. From

September 2011 to December 2017, he served as Senior Vice President of Research and Development and most recently as Executive Vice President of Research and Development at Aduro Biotech, Inc., a biopharmaceutical company. Dr. Brockstedt served as Director of Research at Anza Therapeutics, Inc. from 2007 to 2009, Director of Immunology at Cerus Corporation from 2002 to 2007 and Senior Research Scientist at Aventis Pharmaceuticals, Inc. from 1999 to 2002, each a biopharmaceutical company. Prior to that he was a post-doctoral fellow at the Stanford School of Medicine in the Department of Pathology. Dr. Brockstedt received a Ph.D. in Microbiology from the University of Kiel (graduate work performed at Stanford University) and an M.S. in Microbiology from the University of Kiel.

Eric Hall, CFA has served as our interim Chief Financial Officer and Secretary since March 2019 through his capacity as a partner at FLG Partners, LLC ("FLG Partners"), a Silicon Valley chief financial officer services firm. Mr. Hall has served as a partner at FLG Partners since 2004. In his capacity as a partner at FLG Partners, Mr. Hall has served as Chief Financial Officer at ALX Oncology Inc., a biotechnology company, since October 2018, and at 4Info, Inc., an advertising company, since April 2018. He served as Chief Financial Officer at uBiome, Inc. ("uBiome"), a biotechnology company, from September 2018 to December 2018. Prior to uBiome, Mr. Hall served as Chief Financial Officer at Peninsula Clean Energy from August 2018 to October 2018. He served as Chief Financial Officer at Lightning Bolt Solutions, Inc., a software company, from May 2018 to January 2019. He served as Chief Financial Officer at E2 Consulting Engineers, Inc., an engineering services company, from August 2017 to March 2018. Mr. Hall served as Chief Financial Officer at Singulex, Inc., a medical equipment company, from February 2016 to December 2017. He served as Chief Financial Officer at Xambala Incorporated ("Xambala"), a financial technology company, from June 2015 to November 2015. Prior to Xambala, he served as Chief Financial Officer at Visionnaire Ventures, LLC, an investment firm, from March 2014 to August 2015. Mr. Hall has been a Chartered Financial Analyst (CFA) charterholder since 1990. Mr. Hall obtained an M.B.A. in Finance from Vanderbilt University and an A.B. in Economics from the University of California, Davis.

Key Employees

David Wustrow, Ph.D. has served as our Senior Vice President of Drug Discovery and Preclinical Development since January 2019. Prior to that, he served as our Vice President, Drug Discovery from February 2016 to January 2019. From June 2012 to February 2016, he served as Vice President of Chemical and Pharmaceutical Sciences at Cleave Biosciences, Inc., a biopharmaceutical company. Previously, he held several escalating positions at biotechnology and pharmaceutical companies, including XenoPort Inc., where he served as Vice President, Medicinal Chemistry from 2008 to 2011 and as Executive Director of Scientific Assessment and Licensing in 2012, Neurogen Technologies, Inc., where he served as Executive Director of Chemistry from 2005 to 2008, and Pfizer Inc., where he served as Senior Director of Neuroscience Chemistry from 2003 to 2005. Prior to that, Dr. Wustrow held positions of increasing responsibility at Pfizer Inc. and Parke Davis-Warner Lambert. Dr. Wustrow received an M.S. in Chemistry and a Ph.D. in Organic Synthesis from the University of Rochester. Dr. Wustrow obtained a B.S. in Chemistry from Pennsylvania State University.

Paul Kassner, Ph.D. has served as our Vice President of Quantitative and Computational Biology since January 2016. From January 2003 to December 2015 he served at Amgen, Inc., a biopharmaceutical company, most recently as Director of Research and Head of the Genome Analysis Unit. Dr. Kassner held positions of increasing responsibility at multiple biotechnology companies from 1997 to 2003, including Selective Genetics, Inc., Zyomyx, Inc., Pointilliste, Inc. and Tularik Inc. Dr. Kassner completed his postdoctoral training at UC San Diego, and received a Ph.D. in Immunology from Harvard University and a B.S. in Genetics and Development from the University of Illinois at Champaign-Urbana.

Karen C. Lam has served as our Vice President, Finance and Corporate Controller since June 2019. Prior to that, she was our Senior Director, Finance and Corporate Controller from September 2017 to June 2019. From August 2013 to September 2017, Ms. Lam was Senior Director, Controller of True North Therapeutics, Inc., a biotechnology company. From September 2009 to August 2013, she was Director, Controller at iPierian

Inc., a development stage biotechnology company. Ms. Lam is a Certified Public Accountant (inactive) and received a B.S. in Business Administration from San Francisco State University.

Erin Campany has served as our Vice President, Human Resources, since June 2019. From October 2017 to June 2019, Ms. Campany was Head of Human Resources at Immune Design Corp. (a Merck subsidiary), a biotechnology company. From August 2013 to September 2017, Ms. Campany was Senior Director, Global Human Resources, at Acorda Therapeutics (formerly Biotie Therapies, Inc.), a biotechnology company. Ms. Campany received a B.A. in Psychology from San Jose State University.

Non-Employee Directors

William J. Rieflin, J.D. has served on our board of directors since April 2016 and as the chair of our board of directors since June 2019. From September 2010 to September 2018, he served as the Chief Executive Officer of NGM Biopharmaceuticals. From 2004 until 2010, Mr. Rieflin served as President of XenoPort, Inc., a biotechnology company. Mr. Rieflin also serves as Executive Chairman of the board of directors of NGM Biopharmaceuticals. Mr. Rieflin previously served on the board of directors of Anacor Pharmaceuticals, Inc., a pharmaceutical company, from April 2011 to June 2016 and of XenoPort, Inc. from September 2010 to July 2016. Mr. Rieflin obtained a J.D. from Stanford Law School and an M.B.A. from the University of Chicago. Mr. Rieflin received a B.S. in Industrial and Labor Relations from Cornell University. We believe that Mr. Rieflin's extensive experience in the biopharmaceutical industry, his industry expertise and financial knowledge, and his experience as a member of the board of directors of other public companies provide him with the qualifications and skills to serve as a director of our company.

Michael F. Giordano, M.D. has served on our board of directors since January 2018. From 1999 to 2017, Dr. Giordano worked at Bristol-Myers Squibb Co., a pharmaceutical company, most recently serving as Senior Vice President and Head of Development of Oncology and Immuno-Oncology. Dr. Giordano also serves on the board of directors of Epizyme, Inc., a biopharmaceutical company. He received a M.D. from Weil Cornell Medical College and a B.A. in Natural Science from Johns Hopkins University. We believe that Dr. Giordano's extensive experience in oncology and immuno-oncology provide him with the qualifications and skills to serve as a director of our company.

David V. Goeddel, Ph.D. has served on our board of directors since April 2015. Dr. Goeddel has been a Managing Partner of The Column Group, LLC, a venture capital partnership, since 2007. Prior to that, he served as Amgen's first Senior Scientific Vice President until May 2006. Dr. Goeddel co-founded Tularik Inc., a biotechnology company, in November 1991 and served as Vice President of Research there until 1996 and Chief Executive Officer from 1996 through 2004. Dr. Goeddel also serves on the board of directors of NGM Biopharmaceuticals, Inc. and Peloton Therapeutics, Inc., both biopharmaceutical companies. Dr. Goeddel obtained a Ph.D. in Biochemistry from the University of Colorado, Boulder and a B.A. in Chemistry from the University of California, San Diego. We believe that Dr. Goeddel's scientific training and experience as a director of other publicly traded and privately held biopharmaceutical companies provide him with the qualifications and skills to serve as a director of our company.

Linda Kozick has served on our board of directors since December 2016. From January 2011 to July 2015, Ms. Kozick served as Head of Immuno-Oncology, Oncology Product and Portfolio Strategy for Opdivo and Yervoy Life Cycle Management at Bristol-Myers Squibb Co. Ms. Kozick obtained an M.B.A. from Chapman University. Ms. Kozick also received an M.S. in Molecular Immunology and a B.S. in Medical Technology from SUNY Upstate Medical University. We believe that Ms. Kozick's experience in the biopharmaceutical industry and her technical training provide her with the qualifications and skills to serve as a director of our company.

Family Relationships

There are no family relationships among any of our executive officers or directors.

Composition of Our Board of Directors

Our business and affairs are managed under the direction of our board of directors. We currently have six directors. After the closing of this offering, the number of directors will be fixed by our board of directors, subject to the terms of our amended and restated certificate of incorporation and amended and restated bylaws that will become effective upon the closing of this offering. Each of our current directors will continue to serve as a director until the election and qualification of his or her successor, or until his or her earlier death, resignation or removal.

Our board of directors may establish the authorized number of directors from time to time by resolution. In accordance with our amended and restated certificate of incorporation that will be in effect upon the closing of this offering, immediately after this offering our board of directors will be divided into three classes with staggered three-year terms. At each annual general 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. Our directors will be divided among the three classes as follows:

- the Class I directors will be Dr. Wong and Dr. Goeddel, and their terms will expire at our first annual meeting of stockholders following this offering;
- the Class II directors will be Mr. Rieflin and Ms. Kozick, and their terms will expire at our second annual meeting of stockholders following this offering; and
- the Class III director will be Dr. Giordano, and his term will expire at our third annual meeting of stockholders following this offering.

We expect that 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.

Director Independence

Our board of directors has undertaken a review of the independence of each director. Based on information provided by each director concerning his or her background, employment and affiliations, our board of directors has determined that Dr. Giordano, Dr. Goeddel, Ms. Kozick and Mr. Rieflin do not have relationships that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent" as that term is defined under the applicable listing standards. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our shares held by each non-employee director and the transactions described in the section titled "Certain Relationships and Related Party Transactions."

Committees of Our Board of Directors

Our board of directors has established an audit committee, a compensation committee, and a nominating and corporate governance committee. The composition and responsibilities of each of the committees of our board of directors are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors. Our board of directors may establish other committees as it deems necessary or appropriate from time to time.

Audit Committee

Our audit committee consists of William Rieflin, Linda Kozick and Michael Giordano. Our board of directors has determined that each member of the audit committee satisfies the independence requirements under the Nasdaq listing standards and Rule 10A-3(b)(1) of the Exchange Act. The chair of our audit committee is Mr. Rieflin. Our board of directors has determined that Mr. Rieflin is an "audit committee financial expert" within the meaning of SEC regulations. Each member of our audit committee can read and understand fundamental financial statements in accordance with applicable listing standards. In arriving at these determinations, our board of directors has examined each audit committee member's scope of experience and the nature of his or her employment.

The primary purpose of the audit committee is to discharge the responsibilities of our board of directors with respect to our corporate accounting and financial reporting processes, systems of internal control and financial statement audits, and to oversee our independent registered public accounting firm. Specific responsibilities of our audit committee include:

- helping our board of directors oversee our corporate accounting and financial reporting processes;
- managing and/or assessing the selection, engagement, qualifications, independence and performance of a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;
- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing related party transactions;
- reviewing our policies on risk assessment and risk management;
- reviewing, with our independent registered public accounting firm, our internal quality control procedures, any material issues with such procedures and any steps taken to deal with such issues; and
- pre-approving audit and permissible non-audit services to be performed by the independent registered public accounting firm.

Our audit committee will operate under a written charter, to be effective prior to the closing of this offering, that satisfies the applicable listing standards of Nasdaq.

Compensation Committee

Our compensation committee consists of Michael Giordano and William Rieflin. The chair of our compensation committee is Dr. Giordano. Our board of directors has determined that each member of the compensation committee satisfies the independence requirements under the listing standards of Nasdaq, and is a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act.

The primary purpose of our compensation committee is to discharge the responsibilities of our board of directors in overseeing our compensation policies, plans and programs and to review and determine the

compensation to be paid to our executive officers, directors and other senior management, as appropriate. Specific responsibilities of our compensation committee include:

- · reviewing and recommending to our board of directors the compensation of our chief executive officer and other executive officers;
- reviewing and recommending to our board of directors the compensation of our directors;
- administering our equity incentive plans and other benefit programs;
- reviewing, adopting, amending and terminating incentive compensation and equity plans, severance agreements, profit sharing plans, bonus plans, change-of-control protections and any other compensatory arrangements for our executive officers and other senior management; and
- reviewing and establishing general policies relating to compensation and benefits of our employees, including our overall compensation philosophy.

Our compensation committee will operate under a written charter, to be effective prior to the closing of this offering, that satisfies the applicable listing standards of Nasdaq.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Linda Kozick and Michael Giordano. The chair of our nominating and corporate governance committee is Ms. Kozick. Our board of directors has determined that each member of the nominating and corporate governance committee satisfies the independence requirements under the listing standards of Nasdaq.

Specific responsibilities of our nominating and corporate governance committee include:

- identifying and evaluating candidates, including the nomination of incumbent directors for reelection and nominees recommended by stockholders, to serve on our board of directors;
- considering and making recommendations to our board of directors regarding the composition and chairs of the board of directors and committees of our board of directors;
- reviewing developments in corporate governance practices;
- · developing and making recommendations to our board of directors regarding corporate governance guidelines and matters; and
- · overseeing periodic evaluations of the board of directors' performance, including committees of the board of directors.

Our nominating and corporate governance committee operates under a written charter, to be effective prior to the closing of this offering, that satisfies the applicable listing standards of Nasdaq.

Code of Business Conduct and Ethics

We have adopted a code of business conduct and ethics (the "Code of Conduct") that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. Upon the closing of this offering, our code of business conduct and ethics will be available under the Corporate Governance section of our website at

www.rapt.com. In addition, we intend to post on our website all disclosures that are required by law or the listing standards of Nasdaq concerning any amendments to, or waivers from, any provision of the Code of Conduct. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this prospectus.

Compensation Committee Interlocks and Insider Participation

None of the members of the compensation committee is currently or has been at any time one of our officers or employees. None of our executive officers currently serves, or has served during the last year, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

Non-Employee Director Compensation

In March 2018, the board of directors granted a stock option to purchase 16,666 shares of our common stock to Dr. Giordano and stock options to purchase 4,166 shares of our common stock each to Ms. Kozick and Mr. Rieflin, in each case, at an exercise price per share of \$6.18. The shares underlying Dr. Giordano's option vest in 48 equal monthly installments measured from January 12, 2018, subject to Dr. Giordano's continuous service with us as of each such vesting date. Upon a change in control, the vesting of Dr. Giordano's option shall accelerate in full. The shares underlying Mr. Rieflin's option vest in 48 equal monthly installments measured from June 23, 2017, subject to Mr. Rieflin's continuous service with us as of each such vesting date. The shares underlying Ms. Kozick's option vest in 48 equal monthly installments measured from November 15, 2017, subject to Ms. Kozick's continuous service with us as of each such vesting date.

In addition, we reimburse all of our non-employee directors for their reasonable out-of-pocket expenses incurred in attending board of directors and committee meetings.

The following table sets forth information regarding the compensation earned by or paid to our non-employee directors during fiscal 2018, other than Brian Wong, our President and Chief Executive Officer, who is also a member of our board of directors but did not receive any additional compensation for service as a director. The compensation earned by or paid to Dr. Wong as a named executive officer for fiscal 2018 is set forth below under "Executive Compensation—Summary Compensation Table."

Fees Earned or Paid in Cash (\$)	Option Awards (\$)(1)	Total (\$)
		_
20,000(4)	72,000	92,000
_	_	_
20,000(4)	17,928	37,928
20,000(4)	17,713	37,713
	or Paid in Cash (\$) 20,000(4) 20,000(4)	or Paid in Option Cash Awards (\$) (\$)(1)

⁽¹⁾ The amounts reported represent the aggregate grant date fair value of the stock options granted during fiscal 2018 under our 2015 Plan, computed in accordance with Financial Accounting Standard Board Accounting Standards Codification, Topic 718 ("ASC Topic 718"). The assumptions used in calculating the grant-date fair value of the stock options reported in this column are set forth in the notes to our consolidated financial statements included elsewhere in this prospectus. This amount does not reflect the actual economic value that may be realized by the non-employee director. As of December 31, 2018, the aggregate number of option awards outstanding to each of our directors was 16,666 for Dr. Giordano, 20,832 for Ms. Kozick and 9,721 for Mr. Rieflin (including 1,389 shares early exercised but not yet vested).

⁽²⁾ Dr. Seidenberg resigned from our board in June 2019.

⁽³⁾ Dr. Giordano joined our board in January 2018.

⁽⁴⁾ The amounts in this column represent fees for service on the Board of Directors.

On June 27, 2019, the board of directors granted, contingent upon the completion of this offering, stock options to purchase 7,500 shares of our common stock each to Mr. Rieflin and Ms. Kozick, in each case, at a per share exercise price equal to the initial public offering price of our common stock. One-twelfth of the shares subject to each option will vest each month measured from April 7, 2019 (or December 9, 2018 in the case of Ms. Kozick), subject to the applicable non-employee director's continuous service as of each such vesting date.

Non-Employee Director Compensation Policy

We have adopted a non-employee director compensation policy that will become effective upon the execution of an underwriting agreement related to this offering, pursuant to which our non-employee directors will be eligible to receive compensation for service on our board of directors and committees of our board of directors.

Equity Compensation

Initial Grant

Each new non-employee director who joins our board of directors after our initial public offering will automatically receive a nonstatutory stock option to purchase 22,500 shares of common stock under our 2019 Plan. Each initial grant will vest in a series of three successive equal annual installments over the three-year period measured from the date of grant, subject to the non-employee director's continuous service (as defined in our 2019 Plan) through each applicable vesting date.

Annual Grant

On the date of each annual meeting of our stockholders, each continuing non-employee director will automatically receive a nonstatutory stock option to purchase 7,500 shares of common stock under our 2019 Plan. Each annual grant will vest on the earlier of the one year anniversary of the grant date or the day prior to the Company's next annual meeting occurring after the grant date, subject to the non-employee director's continuous service through the vesting date.

Vesting Acceleration

In the event of a change of control (as defined in our 2019 Plan), any unvested portion of an equity award granted under the policy will fully vest immediately prior to the closing of such change of control, subject to the non-employee director's continuous service immediately prior to the closing of the change of control.

Cash Compensation

Commencing with the first calendar quarter following our initial public offering, each non-employee director will receive an annual cash retainer of \$35,000 for serving on our board of directors. The chair of our board of directors will receive an additional annual cash retainer of \$30,000.

The chairs and members of the three committees of our board of directors will be entitled to the following additional annual cash retainers:

	Chair	Member
Board Committee	Fee	Fee
Audit Committee	\$25,000	\$12,500
Compensation Committee	10,000	5,000
Nominating and Corporate Governance Committee	8.000	4,000

All annual cash compensation amounts will be payable in equal quarterly installments, in arrears no later than 30 days following the end of each fiscal quarter in which the service occurred, prorated for any partial quarter of service.

EXECUTIVE COMPENSATION

Our named executive officers for fiscal 2018, consisting of our principal executive officer and the next two most highly compensated executive officers, were:

- Brian Wong, M.D., Ph.D., our President and Chief Executive Officer;
- Rekha Hemrajani, our former Chief Operating Officer; and
- William Ho, M.D., Ph.D., our Chief Medical Officer.

Summary Compensation Table

The following table presents all of the compensation awarded to our named executive officers during fiscal 2018.

Name and Principal Position	<u>Year</u>	Salary _(\$)	Bonus <u>(\$)</u>	Option Awards (\$)(1)	Non-Equity Incentive Plan Compensation(2) (\$)	All Other Compensation (\$)	Total <u>(\$)</u>
Brian Wong, M.D., Ph.D.	2018	425,000	_	865,920	119,000	_	1,409,920
President and Chief Executive Officer							
Rekha Hemrajani former Chief Operating Officer(3)	2018	326,510	_	72,160	75,914	_	474,584
William Ho, M.D., Ph.D. Chief Medical Officer	2018	350,000	_	72,160	81,375	_	503,535

- (1) The amounts disclosed represent the aggregate grant date fair value of the stock options granted to our named executive officers during fiscal 2018 under our 2015 Plan, computed in accordance with ASC Topic 718. The assumptions used in calculating the grant date fair value of the stock options are set forth in the notes to our audited consolidated financial statements included elsewhere in this prospectus. This amount does not reflect the actual economic value that may be realized by the named executive officer.
- (2) The amount disclosed represents the executive officer's total performance bonus earned for fiscal 2018 as described below under "—Annual Performance-Based Bonus Opportunity".
- (3) Ms. Hemrajani resigned as our Chief Operating Officer as of March 19, 2019. Pursuant to the Hemrajani Separation Agreement with us dated March 19, 2019 and amended April 30, 2019, she will provide certain consulting services to us through a business entity that she owns jointly with her husband until June 20, 2019 (unless the consulting arrangement is earlier terminated by her or us).

Annual Performance-Based Bonus Opportunity

Our executive officers are eligible to receive performance-based cash bonuses, which are designed to provide appropriate incentives to our executives to achieve defined performance goals and to reward our executives for individual achievement towards these goals. The performance-based bonus each executive officer is eligible to receive is generally based on the extent to which we achieve the corporate goals that our board or compensation committee establishes and is paid annually. Annually, the compensation committee of our board of directors reviews the company's performance and determines the actual bonus payout to be awarded to each of our eligible executive officers.

Executive Employment Arrangements

Brian Wong

We entered into an employment letter agreement with Dr. Wong, our President and Chief Executive Officer, in July 2019. His employment letter agreement has no specific term and provides that Dr. Wong is an at-will employee. His employment letter agreement also provides that his annual base salary is \$440,000 (or \$484,000 following the completion of this offering), and that he is eligible for an annual discretionary target bonus equal to 40% (or 50% following the completion of this offering) of his annual base salary, based on the achievement of individual and corporate performance objectives.

Pursuant to the employment letter agreement with Dr. Wong, if Dr. Wong's employment is terminated outside the 12 month period following a "change in control" either (1) by us without "cause" (and not due to Dr. Wong's death or disability) or (2) by Dr. Wong for "good reason" (as such terms are defined in Dr. Wong's employment letter agreement), then, subject to the preconditions described below, Dr. Wong will be entitled to receive the following payments and benefits: (i) continuing payments of his then-current base salary (or the level in effect before any reduction in base salary that constitutes good reason) for a period of 12 months and (ii) reimbursement of premiums for coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended, or COBRA, for Dr. Wong and his eligible dependents, if any, for up to 12 months, or taxable monthly payments for the equivalent period in the event payment of the COBRA premiums would violate applicable law.

If Dr. Wong's employment is terminated during the 12 month period following a change in control either (1) by us without cause (and not due to Dr. Wong's death or disability) or (2) by Dr. Wong for good reason, then, subject to the preconditions described below, Dr. Wong will be entitled to receive the following payments and benefits: (i) continuing payments of his then-current base salary (or the level in effect before any reduction in base salary that constitutes good reason) for a period of 18 months; (ii) a lump sum cash payment equal to Dr. Wong's annual discretionary target bonus; (iii) reimbursement of premiums for coverage under COBRA, for Dr. Wong and his eligible dependents, if any, for up to 18 months, or taxable monthly payments for the equivalent period in the event payment of the COBRA premiums would violate applicable law; and (iv) accelerated vesting and exercisability of all outstanding equity awards.

The receipt of the severance payments and benefits described above is conditioned on Dr. Wong timely signing and not revoking a release of claims in a form acceptable to us, as well as remaining in compliance with all continuing obligations he owes to us, including those under the confidential information and inventions assignment agreement applicable to Dr. Wong.

Rekha Hemrajani

Ms. Hemrajani's employment with us terminated on March 19, 2019. In connection with Ms. Hemrajani's termination of employment, we entered into a separation agreement with her dated March 19, 2019. Pursuant to the separation agreement, Ms. Hemrajani provided certain consulting services to us through a business entity that she owns jointly with her husband until June 20, 2019 in exchange for consulting fees paid at a rate of \$425 per hour. Pursuant to the separation agreement, the options granted to Ms. Hemrajani did not vest during the period she provided consulting services to us; however, the period following her termination of employment to exercise the vested shares subject to her options was extended to June 20, 2020.

William Ho

We entered into an employment letter agreement with Dr. Ho, our Chief Medical Officer, in July 2019. His employment letter agreement has no specific term and provides that Dr. Ho is an at-will employee. His employment letter agreement also provides that his annual base salary is \$360,500 (or \$385,000 following the

completion of this offering), and that he is eligible for an annual discretionary target bonus equal to 30% (or 40% following the completion of this offering) of his annual base salary, based on the achievement of individual and corporate performance objectives.

Pursuant to the employment letter agreement with Dr. Ho, if Dr. Ho's employment is terminated outside the 12 month period following a "change in control" either (1) by us without "cause" (and not due to Dr. Ho's death or disability) or (2) by Dr. Ho for "good reason" (as such terms are defined in Dr. Ho's employment letter agreement), then, subject to the preconditions described below, Dr. Ho will be entitled to receive the following payments and benefits: (i) continuing payments of his then-current base salary (or the level in effect before any reduction in base salary that constitutes good reason) for a period of 9 months and (ii) reimbursement of premiums for coverage under COBRA, for Dr. Ho and his eligible dependents, if any, for up to 9 months, or taxable monthly payments for the equivalent period in the event payment of the COBRA premiums would violate applicable law.

If Dr. Ho's employment is terminated during the 12 month period following a change in control either (1) by us without cause (and not due to Dr. Ho's death or disability) or (2) by Dr. Ho for good reason, then, subject to the preconditions described below, Dr. Ho will be entitled to receive the following payments and benefits: (i) continuing payments of his then-current base salary (or the level in effect before any reduction in base salary that constitutes good reason) for a period of 12 months; (ii) a lump sum cash payment equal to Dr. Ho's annual discretionary target bonus; (iii) reimbursement of premiums for coverage under COBRA, for Dr. Ho and his eligible dependents, if any, for up to 12 months, or taxable monthly payments for the equivalent period in the event payment of the COBRA premiums would violate applicable law; and (iv) accelerated vesting and exercisability of all outstanding equity awards.

The receipt of the severance payments and benefits described above is conditioned on Dr. Ho timely signing and not revoking a release of claims in a form acceptable to us, as well as remaining in compliance with all continuing obligations he owes to us, including those under the confidential information and inventions assignment agreement applicable to Dr. Ho.

Potential Payments upon Termination or Change in Control

Regardless of the manner in which a named executive officer's service terminates, each named executive officer is entitled to receive amounts earned during his or her term of service, including unpaid salary and unused vacation.

Dr. Wong and Dr. Ho are eligible to receive potential termination or change of control payments pursuant to their employment letter agreements, as described in "—Executive Employment Arrangements—Brian Wong" and "—Executive Employment Arrangements—Dr. Ho."

Outstanding Equity Awards as of December 31, 2018

The following table presents the outstanding equity incentive plan awards held by each named executive officer as of December 31, 2018.

		Option Awards(1)				Stock Awards(1)		
Name	Grant Date	Number of Securities Underlying Unexercised Options Exercisable	Number of Securities Underlying Unexercised Options Unexercisable	Option Exercise Price Per Share (\$)	Option Expiration Date	Number of Shares that Have Not Vested(#)	Market Value of Shares that Have Not Vested (\$)(2)	
Brian Wong, M.D., Ph.D.	8/27/2015	_	_	_	_	55,000(3)	346,500	
	3/8/2017	39,583(4)	52,083(4)	2.04	3/7/2027			
	3/28/2018	_	200,000(5)	6.18	3/27/2028			
Rekha Hemrajani	6/15/2016 6/15/2016					34,375(6) 25,000(7)	216,563 157,500	
	3/28/2018	_	16,666(8)	6.18	3/27/2028			
William Ho, M.D., Ph.D.	5/13/2015 7/21/2015					4,774(9) 972(10)	30,076 6,124	
	1/18/2017 3/28/2018	6,456(9) —	7,018(11) 16,666(12)	2.04 6.18	1/17/2027 3/27/2028			

- (1) Each of the equity awards was granted under the 2015 Plan, the terms of which plan is described below under "—Equity Incentive Plans."
- (2) This amount reflects the fair value of our common stock of \$6.30 as of December 31, 2018 (the determination of the fair value by our board of directors as of the most proximate date) multiplied by the amount shown in the column "Stock Awards—Number of Shares that Have Not Vested."
- (3) On August 27, 2015, Dr. Wong was granted an option to purchase 330,000 shares of our common stock at a per share exercise price of \$1.02. Dr. Wong immediately exercised the option as to all 330,000 shares subject to the option before they became vested, and such shares are subject to a repurchase right in favor of us. 25% of the shares were released from our repurchase right on August 27, 2016, and 1/48th of the shares will be released from our repurchase right each month thereafter, subject to Dr. Wong's continuous service with us. This award is subject to vesting acceleration on the terms described in "—Executive Employment Arrangements—Brian Wong."
- (4) 25% of the shares subject to the option vested on January 1, 2018, the first anniversary of the vesting commencement date, and the remainder will vest in 36 equal monthly installments thereafter, subject to Dr. Wong's continuous service as of each such vesting date.
- (5) 25% of the shares subject to the option vested on January 1, 2019, the first anniversary of the vesting commencement date, and the remainder will vest in 36 equal monthly installments thereafter, subject to Dr. Wong's continuous service as of each such vesting date.
- (6) On June 15, 2016, Ms. Hemrajani was granted an option to purchase 91,666 shares of our common stock at a per share exercise price of \$2.04. Ms. Hemrajani immediately exercised the option as to all 91,666 shares subject to the option before they became vested, and such shares are subject to a repurchase right in favor of us. 25% of the shares were released from our repurchase right on June 15, 2017, and 1/48th of the shares will be released from our repurchase right each month thereafter, subject to Ms. Hemrajani's continuous service with us.
- (7) On June 15, 2016, Ms. Hemrajani was granted an option to purchase 33,333 shares of our common stock at a per share exercise price of \$2.04. Ms. Hemrajani immediately exercised the option as to all 33,333 shares subject to the option before they became vested, and such shares are subject to a repurchase right in favor of us. On February 28, 2018, we repurchased 8,333 of these shares. Of the remaining 25,000 shares, 25% of the shares shall be released from our repurchase right on the satisfaction of certain performance milestones, and 1/48th of the shares will be released from our repurchase right each month thereafter, subject to

- Ms. Hemrajani's continuous service with us. As of December 31, 2018, the performance milestones were not achieved.
- (8) 25% of the shares subject to the option vested on January 1, 2019, the first anniversary of the vesting commencement date, and the remainder were scheduled to vest in 36 equal monthly installments thereafter, subject to Ms. Hemrajani's continuous service as of each such vesting date.

 However, pursuant to the separation agreement between us and Ms. Hemrajani, the option ceased vesting as of March 19, 2019, the date

 Ms. Hemrajani's employment with us terminated.
- (9) On May 13, 2015, Dr. Ho was granted an option to purchase 45,833 shares of our common stock at a per share exercise price of \$1.02. Dr. Ho exercised the option as to all 45,833 shares subject to the option on July 8, 2015, before they became vested, and such shares are subject to a repurchase right in favor of us. 25% of the shares were released from our repurchase right on May 15, 2016, and 1/48th of the shares will be released from our repurchase right each month thereafter, subject to Dr. Ho's continuous service with us. This award is subject to vesting acceleration on the terms described in "—Executive Employment Arrangements—William Ho."
- (10) On July 21, 2015, Dr. Ho was granted an option to purchase 6,666 shares of our common stock at a per share exercise price of \$1.02. Dr. Ho exercised the option as to all 6,666 shares subject to the option on July 25, 2015, before they became vested, and such shares are subject to a repurchase right in favor of us. 25% of the shares were released from our repurchase right on July 14, 2016, and 1/48th of the shares will be released from our repurchase right each month thereafter, subject to Dr. Ho's continuous service with us. This award is subject to vesting acceleration on the terms described in "—Executive Employment Arrangements—William Ho."
- (11) 25% of the shares subject to the option vested on January 1, 2018, the first anniversary of the vesting commencement date, and the remainder will vest in 36 equal monthly installments thereafter, subject to Dr. Ho's continuous service as of each such vesting date. This option is subject to vesting acceleration on the applicable terms described in "—Potential Payments upon Termination or Change in Control."
- (12) 25% of the shares subject to the option vested on January 1, 2019, the first anniversary of the vesting commencement date, and the remainder will vest in 36 equal monthly installments thereafter, subject to Dr. Ho's continuous service as of each such vesting date. This option is subject to vesting acceleration on the applicable terms described in "—Potential Payments upon Termination or Change in Control."

On June 27, 2019, the board of directors granted, contingent upon the completion of this offering, a stock option to purchase 83,333 shares of our common stock to Dr. Wong at a per share exercise price equal to the initial public offering price of our common stock. Twenty-five percent of the shares subject to the option vest on June 27, 2020, the first anniversary of the vesting commencement date, and the remainder will vest in 36 equal monthly installments thereafter, subject to Dr. Wong's continuous service as of each such vesting date. This option is subject to vesting acceleration on the applicable terms described in "—Executive Employment Arrangements—Brian Wong."

On June 27, 2019, the board of directors granted, contingent upon the completion of this offering, a stock option to purchase 22,083 shares of our common stock to Dr. Ho at a per share exercise price equal to the initial public offering price of our common stock. Twenty-five percent of the shares subject to the option vest on June 27, 2020, the first anniversary of the vesting commencement date, and the remainder will vest in 36 equal monthly installments thereafter, subject to Dr. Ho's continuous service as of each such vesting date. This option is subject to vesting acceleration on the applicable terms described in "—Executive Employment Arrangements—William Ho."

Other Compensation and Benefits

Dr. Wong and Dr. Ho are eligible to participate in our employee benefit plans, including our medical, dental, vision, life, disability and accidental death and dismemberment insurance plans, in each case on the same basis as all of our other employees. We pay the premiums for the life, disability, accidental death and dismemberment insurance for all of our employees, including Dr. Wong and Dr. Ho. We generally do not provide perquisites or personal benefits to our named executive officers.

Our named executive officers did not participate in, or earn any benefits under, any nonqualified deferred compensation plan sponsored by us during the fiscal year ended December 31, 2018. Our board of directors may elect to provide our officers and other employees with nonqualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

Our named executive officers did not participate in, or otherwise receive any benefits under, any pension or retirement plan sponsored by us during fiscal 2018.

Employee Benefit and Stock Plans

The principal features of our equity incentive plans and 401(k) plan are summarized below. These summaries are qualified in their entirety by reference to the actual text of the plans, which, other than the 401(k) plan, are filed as exhibits to the registration statement of which this prospectus is a part.

2019 Equity Incentive Plan

Our board of directors adopted and our stockholders approved our 2019 Plan, on June 27, 2019, and July 18, 2019, respectively. The 2019 Plan will become effective, and no stock awards may be granted under the 2019 Plan until immediately prior to the execution of the underwriting agreement related to this offering. Once the 2019 Plan is effective, no further grants will be made under the 2015 Plan.

Stock Awards. The 2019 Plan provides for the grant of incentive stock options ("ISOs"), within the meaning of Section 422 of the Code, nonstatutory stock options ("NSOs"), stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation, which are collectively referred to as stock awards. Additionally, the 2019 Plan provides for the grant of performance cash awards. ISOs may be granted only to our employees and to any of our parent or subsidiary corporation's employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants of ours and any of our affiliates.

Share Reserve. Initially, the aggregate number of shares of our common stock that may be issued pursuant to stock awards under the 2019 Plan is the sum of (i) 1,786,166 new shares plus (ii) the number of shares reserved, and remaining available for issuance, under our 2015 Plan at the time our 2019 Plan became effective and (iii) the number of shares subject to stock options or other stock awards granted under our 2015 Plan that would have otherwise returned to our 2015 Plan (such as upon the expiration or termination of a stock award prior to vesting). The number of shares of our common stock reserved for issuance under our 2019 Plan will automatically increase on January 1 of each year, beginning on January 1, 2020 and continuing through and including January 1, 2029, by 4% of the total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. The maximum number of shares that may be issued upon the exercise of ISOs under our 2019 Plan is 10,445,457 shares.

If a stock award granted under the 2019 Plan expires or otherwise terminates without being exercised in full, or is settled in cash, the shares of our common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2019 Plan. In addition, the following types of shares under the 2019 Plan may become available for the grant of new stock awards under the 2019 Plan: (1) shares that are forfeited to or repurchased by us prior to becoming fully vested; (2) shares withheld to satisfy income or employment withholding taxes; or (3) shares used to pay the exercise or purchase price of a stock award. Shares issued under the 2019 Plan may be previously unissued shares or reacquired shares bought by us on the open market.

The maximum number of shares of common stock subject to stock awards granted under the 2019 Plan or otherwise during any one calendar year to any non-employee director, taken together with any cash fees paid by us to such non-employee director during such calendar year for service on the board of directors, will not

exceed \$750,000 in total value (calculating the value of any such stock awards based on the grant date fair value of such stock awards for financial reporting purposes), or, with respect to the calendar year in which a non-employee director is first appointed or elected to our board of directors, \$1,000,000.

Administration. Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2019 Plan. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, (2) determine the number of shares of common stock to be subject to such stock awards and (3) specify the other terms and conditions, including the strike price or purchase price and vesting schedule, applicable to such awards. Subject to the terms of the 2019 Plan, our board of directors or the authorized committee, referred to as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and the vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator will also determine the exercise price, strike price or purchase price of stock awards granted and the types of consideration to be paid for the stock award.

The plan administrator has the authority to modify outstanding stock awards under our 2019 Plan. Subject to the terms of our 2019 Plan, the plan administrator has the authority, without stockholder approval, to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

Stock Options. ISOs and NSOs are evidenced by stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2019 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2019 Plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2019 Plan, up to a maximum of 10 years. Unless the terms of an option holder's stock option agreement provide otherwise, if an option holder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term will automatically be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an option holder's service relationship with us or any of our affiliates ceases due to disability or death, or an option holder dies within a certain period following cessation of service, the option holder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the option holder, (4) a net exercise of the option if it is an NSO and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An option holder may designate a beneficiary, however, who may exercise the option following the option holder's death.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an option holder during any calendar year under

all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will be treated as NSOs. No ISOs may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our parent or subsidiary corporations unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Awards. Restricted stock awards are evidenced by restricted stock award agreements adopted by the plan administrator. Restricted stock awards may be granted in consideration for (1) cash, check, bank draft or money order, (2) services rendered to us or our affiliates or (3) any other form of legal consideration. Common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule as determined by the plan administrator. Rights to acquire shares under a restricted stock award may be transferred only upon such terms and conditions as set by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock awards that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Restricted Stock Unit Awards. Restricted stock unit awards are evidenced by restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration or for no consideration. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Rights under a restricted stock unit award may be transferred only upon such terms and conditions as set by the plan administrator. Restricted stock unit awards may be subject to vesting as determined by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

Stock Appreciation Rights. Stock appreciation rights are evidenced by stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount in cash or stock equal to (1) the excess of the per share fair market value of our common stock on the date of exercise over the strike price, multiplied by (2) the number of shares of common stock with respect to which the stock appreciation right is exercised. A stock appreciation right granted under the 2019 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

The plan administrator determines the term of stock appreciation rights granted under the 2019 Plan, up to a maximum of 10 years. Unless the terms of a participant's stock appreciation right agreement provides otherwise, if a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term will be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Unless the plan administrator provides otherwise, stock appreciation rights generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. A stock appreciation right holder may designate a beneficiary, however, who may exercise the stock appreciation right following the holder's death.

Performance Awards. Our 2019 Plan permits the grant of performance-based stock and cash awards. The performance goals that may be selected include one or more of the following: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) earnings before interest, taxes, depreciation, amortization and legal settlements; (5) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (7) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense) and stock-based compensation; (7) earnings before interest, taxes, depreciation, amortization, legal settlements, other income (expense), stock-based compensation and changes in deferred revenue; (8) total stockholder return; (9) return on equity or average stockholder's equity; (10) return on assets, investment, or capital employed; (11) stock price; (12) margin (including gross margin); (13) income (before or after taxes); (14) operating income; (15) operating income after taxes; (16) pre-tax profit; (17) operating cash flow; (18) sales or revenue targets; (19) increases in revenue or product revenue; (20) expenses and cost reduction goals; (21) improvement in or attainment of working capital levels; (22) economic value added (or an equivalent metric); (23) market share; (24) cash flow; (25) cash flow per share; (26) share price performance; (27) debt reduction; (28) implementation or completion of projects or processes; (29) stockholders' equity; (30) capital expenditures; (31) debt levels; (32) operating profit or net operating profit; (33) workforce diversity; (34) growth of net income or operating income; (35) billings; (36) bookings; (37) employee retention; (38) user satisfaction; (39) the number of users, including in-licensing and out-licensing of intellectual property); and (43) other measures of performance selected by o

The performance goals may be based on company-wide performance or performance of one or more business units, divisions, affiliates, or business segments, and may be either absolute or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise in the award agreement at the time the award is granted or in such other document setting forth the performance goals at the time the goals are established, we will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any items that are unusual in nature or occur infrequently as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by us achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock-based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; and (12) to exclude the effect of any other unusual, nonrecurring gain or loss or other extraordinary item. In addition, we retain the discretion to adjust or eliminate the compensation or economic benefit due upon attainment of the goals. The performance goals may differ from participant to participant and from award to award.

Other Stock Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

Changes to Capital Structure. If there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2019 Plan, (2) the class and maximum number of shares by which the

share reserve may increase automatically each year, (3) the class and number of shares that may be issued upon the exercise of ISOs and (4) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our board of directors may deem appropriate; or
- make a payment equal to the excess of (1) the value of the property the participant would have received upon exercise of the stock award over (2) the exercise price or strike price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2019 Plan, a significant corporate transaction is generally the consummation of (1) a sale or other disposition of all or substantially all of our consolidated assets, (2) a sale or other disposition of at least 50% of our outstanding securities, (3) a merger, consolidation or similar transaction following which we are not the surviving corporation or (4) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

Change in Control. The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability or settlement in the event of a change in control. Under the 2019 Plan, a change in control is generally (1) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction immediately after which our stockholders do not own more than 50% of the combined voting power of the surviving entity (or its parent company), (3) a consummated sale, lease or exclusive license or other disposition of all or substantially all of our consolidated assets and (4) certain dissolutions, liquidations and changes in the board of directors.

Amendment and Termination. Our board of directors has the authority to amend, suspend or terminate our 2019 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent and provided further that certain types of amendments will require the approval of our stockholders. No ISOs may be granted after the tenth anniversary of the date our board of directors adopts our 2019 Plan.

2019 Employee Stock Purchase Plan

Our board of directors adopted the ESPP on June 27, 2019 and our stockholders approved the ESPP on July 18, 2019. The ESPP will become effective immediately prior to and contingent upon the date of the underwriting agreement related to this offering. The purpose of the ESPP is to secure the services of new employees, to retain the services of existing employees and to provide incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. The ESPP is intended to qualify as an "employee stock purchase plan" within the meaning of Section 423 of the Code.

Share Reserve. Following this offering, the ESPP will authorize the issuance of 240,336 shares of our common stock pursuant to purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, from January 1, 2020 (assuming the ESPP becomes effective in 2019) through January 1, 2029, by the lesser of (1) 1% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, and (2) 240,336 shares; provided, that prior to the date of any such increase, our board of directors may determine that such increase will be less than the amount set forth in clauses (1) and (2).

Administration. Our board of directors intends to delegate concurrent authority to administer the ESPP to our compensation committee. The ESPP is implemented through a series of offerings under which eligible employees are granted purchase rights to purchase shares of our common stock on specified dates during such offerings. Under the ESPP, we may specify offerings with durations of not more than 27 months and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. An offering under the ESPP may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to 15% of their earnings (as defined in the ESPP) for the purchase of our common stock under the ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for the accounts of employees participating in the ESPP at a price per share equal to the lower of (a) 85% of the fair market value of a share of our common stock on the first trading date of an offering or (b) 85% of the fair market value of a share of our common stock on the date of purchase.

Limitations. Employees may have to satisfy one or more of the following service requirements before participating in the ESPP, as determined by our board of directors, including: (1) being customarily employed for more than 20 hours per week; (2) being customarily employed for more than five months per calendar year; or (3) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the ESPP at a rate in excess of \$25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for each year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value pursuant to Section 424(d) of the Code.

Changes to Capital Structure. If there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the board of directors will make appropriate adjustments to (1) the number of shares reserved under the ESPP, (2) the maximum number of shares by which the share reserve may increase automatically each year, (3) the number of shares and purchase price of all outstanding purchase rights and (4) the number of shares that are subject to purchase limits under ongoing offerings.

Corporate Transactions. In the event of certain significant corporate transactions, including (1) a sale of all or substantially all of our assets, (2) the sale or disposition of 50% of our outstanding securities, (3) the consummation of a merger or consolidation where we do not survive the transactions and (4) the consummation of a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction, any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within ten business days prior to such corporate transaction, and such purchase rights will terminate immediately.

ESPP Amendments, *Termination*. Our board of directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP, as required by applicable law or listing requirements.

2015 Stock Plan

Our board of directors adopted and our stockholders approved our 2015 Plan in April 2015. Our 2015 Plan has been periodically amended, most recently in December 2018. Our 2015 Plan will be terminated prior to the closing of this offering, and thereafter we will not grant any additional awards under our 2015 Plan. However, our 2015 Plan will continue to govern the terms and conditions of the outstanding awards previously granted thereunder.

As of March 31, 2019, stock options covering 971,496 shares of our common stock with a weighted-average exercise price of \$4.99 per share were outstanding, and 540,554 shares of our common stock remained available for the future grant of awards under our 2015 Plan. Any shares of our common stock remaining available for issuance under our 2019 Plan becomes effective will become available for issuance under our 2019 Plan. In addition, after the effective date of our 2019 Plan, any shares subject to options granted under our 2015 Plan that expire or terminate prior to exercise or are withheld to satisfy tax withholding obligations related to the option or the exercise price of the option, will be added to the number of shares then available for issuance under our 2019 Plan.

Administration. Our board of directors or a committee delegated by our board of directors administers our 2015 Plan. Subject to the terms of our 2015 Plan, the administrator has the authority and discretion to take any actions it deems necessary or advisable for the administration of our 2015 Plan, including modifying outstanding options or cancelling outstanding options in return for a new option or a different type of award for the same or a different number of shares and at the same or a different exercise price (if applicable).

Options. The exercise price per share of all options granted under our 2015 Plan must be at least 100% of the fair market value per share of our common stock on the grant date. The term of an option may not exceed ten years. An incentive stock option to be granted to an employee who owns more than 10% of the total combined voting power of all classes of our stock or any of our parent or subsidiary corporations may not have a term exceeding five years and must have a per share exercise price of at least 110% of the fair market value per share of our common stock on the grant date. After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. In the absence of a specified time in an option agreement, if termination is due to death or disability, the option will remain exercisable for twelve months or six months, respectively. In all other cases, in the absence of a specified time in an option agreement, the option will remain exercisable for three months following the termination of service. An option may not be exercised later than the expiration of its term. Subject to the provisions of our 2015 Plan, the administrator determines the other terms of options, including any vesting and exercisability requirements and the method of payment of the option exercise price.

Changes to Capital Structure. In the event there is a specified type of change in our capital structure, such as a subdivision, combination or consolidation of our outstanding stock, appropriate adjustments will be made to (i) the number and kind of shares available for issuance under our 2015 Plan and (ii) the number and kind of shares covered by and the exercise price of each outstanding option granted under our 2015 Plan.

Corporate Transactions. In the event we are a party to a merger or consolidation, or in the event of a sale of all or substantially all of our stock or assets, each outstanding option will be treated as our board of directors determines, which treatment may include one or more of the following:

- · continuation, assumption, or substitution of the option by the surviving corporation or the parent of the surviving corporation;
- cancellation of the option and a payment to the optionholder with respect to each share subject to the vested portion of the option as of the transaction date equal to the excess of (i) the value, as determined by our board of directors, of the property (including cash) received by the holder of a share of our common stock as a result of the transaction over (ii) the per share exercise price of the option;
- cancellation of the option without the payment of any consideration, provided the optionholder must be notified of such treatment and given at least five business days preceding the effective date of the transaction to exercise his or her option to the extent vested (unless a shorter period is required to permit a timely closing of the transaction and such shorter period still offers the optionholder a reasonable opportunity to exercise his or her option);
- suspension of the optionholder's right to exercise his or her option during a limited period of time preceding the closing of the transaction if such suspension is administratively necessary to permit the closing of the transaction;
- · termination of any right the optionholder has to exercise the option prior to vesting in the shares subject to the option; or
- acceleration of the vesting and exercisability of the option.

Our board of directors is not obligated to treat all options in the same manner.

Plan Amendment or Termination. Our board of directors may amend, suspend or terminate our 2015 Plan at any time. To the extent required by applicable law, any amendment to our 2015 Plan will be subject to stockholder approval. The termination or amendment of our 2015 Plan may not affect any option previously granted under our 2015 Plan. As discussed above, we will terminate our 2015 Plan prior to the closing of this offering and no new awards will be granted thereunder following such termination.

401(k) Plan

We maintain a 401(k) plan that provides eligible U.S. employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees are able to defer eligible compensation up to certain Code limits, which are updated annually. We have the ability to make matching and discretionary contributions to the 401(k) plan. Currently, we do not make matching contributions or discretionary contributions to the 401(k) plan. The 401(k) plan is intended to be qualified under Section 401(a) of the Code, with the related trust intended to be tax exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan are deductible by us when made, and contributions and earnings on those amounts are not generally taxable to the employees until withdrawn or distributed from the 401(k) plan.

Limitations of Liability and Indemnification Matters

Upon the closing of this offering, our amended and restated certificate of incorporation will contain provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to the corporation or its 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; or
- any transaction from which the director derived an improper personal benefit.

Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated certificate of incorporation that will be in effect upon the closing of this offering will authorize us to indemnify our directors, officers, employees and other agents to the fullest extent permitted by Delaware law. Our amended and restated bylaws that will be in effect on the closing of this offering will provide that we are required to indemnify our directors and officers to the fullest extent permitted by Delaware law and may indemnify our other employees and agents. Our amended and restated bylaws that will be in effect on the closing of this offering will also provide that, on satisfaction of certain conditions, we will 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 the provisions of Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors and executive officers. With certain exceptions, these agreements provide for indemnification for related expenses including attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in connection with any action, proceeding or investigation. We believe that these amended and restated certificate of incorporation and amended and restated bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors 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 other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation arrangements for our directors and executive officers, which are described elsewhere in this prospectus, below we describe transactions since January 1, 2016 and each currently proposed transaction 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 outstanding capital stock, or any immediate family member of, or person sharing the household with, any of these individuals or entities, had or will have a direct or indirect material interest.

Equity and other compensation, termination, change in control and other arrangements are described in the section titled "Executive compensation." We also describe below certain other transactions with our directors, executive officers and stockholders.

Preferred Stock Financings

Series B Convertible Preferred Stock Financing

In April 2016, we issued and sold to investors in a private placement 25,000,000 shares of our Series B convertible preferred stock at a price per share of \$2.00, for aggregate consideration of \$50 million. Each six shares of Series B convertible preferred stock will automatically convert into one share of our common stock upon completion of this offering.

The following table summarizes the Series B convertible preferred stock purchased by directors, executive officers, beneficial owners of more than 5% of our capital stock (on an as-converted basis) or any member of the immediate family of any of the foregoing persons.

	Series B preferred	Total purchase
<u>Participants</u>	stock	<u>price</u>
5% or greater stockholders and directors ⁽¹⁾		
Entities affiliated with Topspin Fund, LP(2)	9,850,000	\$ 19,700,000
Entities affiliated with The Column Group, LLC(3)	7,000,000	\$ 14,000,000
The Regents of the University of California	5,000,000	\$ 10,000,000
KPCB Holdings, Inc., as nominee	1,000,000	\$ 2,000,000
The Wong Family Trust Dated February 4, 2008(4)	150,000	\$ 300,000
Rieflin Family Trust u/a dtd 4/3/00, William J. Rieflin and Prudence H. Rieflin, Trustees(5)	100,000	\$ 200,000

- (1) Additional details regarding these stockholders and their equity holdings are provided in this prospectus under the caption "Principal Stockholders."
- (2) Entities affiliated with Topspin Fund, LP holding our securities whose shares are aggregated for purposes of reporting share ownership information include Topspin Fund, LP and Topspin Biotech Fund II, LP.
- (3) Entities affiliated with The Column Group, LLC holding our securities whose shares are aggregated for purposes of reporting share ownership information include The Column Group, LP and The Column Group II. David V. Goeddel, a member of our board of directors, is a Managing Partner at The Column Group, LLC.
- (4) Brian Wong, our President and Chief Executive Officer and a member of our board of directors, is a trustee of The Wong Family Trust Dated February 4, 2008.
- (5) William Rieflin, a member of our board of directors, is a trustee of Rieflin Family Trust u/a dtd 4/3/00, William J. Rieflin and Prudence H. Rieflin, Trustees.

Series C Convertible Preferred Stock Financing

In December 2017, we issued and sold to investors in a private placement 13,054,679 shares of our Series C convertible preferred stock at a purchase price of \$2.2925 per share for aggregate gross proceeds of approximately \$30 million. In June 2018, we sold an additional 13,054,684 shares of Series C convertible preferred stock at a purchase price of \$2.2925 per share for aggregate gross proceeds of approximately \$30 million. Each six shares of Series C convertible preferred stock will automatically convert into one share of our common stock upon completion of this offering.

The following table summarizes the Series C convertible preferred stock purchased by directors, executive officers, beneficial owners of more than 5% of our capital stock (on an as-converted basis) or any member of the immediate family of any of the foregoing persons.

Participants	Series C <u>preferred stock</u>	Total purchase <u>price</u>
5% or greater stockholders and directors(1)		
Entities affiliated with The Column Group, LLC(2)	13,086,150	\$ 30,000,000
Entities affiliated with Topspin Fund, LP(3)	2,181,025	\$ 5,000,000
KPCB Holdings, Inc., as nominee	2,181,025	\$ 5,000,000
The Regents of the University of California	2,085,500	\$ 4,781,009

- Additional details regarding these stockholders and their equity holdings are provided in this prospectus under the caption "Principal Stockholders."
- (2) Entities affiliated with The Column Group, LLC holding our securities whose shares are aggregated for purposes of reporting share ownership information include The Column Group, LP, The Column Group II, LP, Ponoi Capital, LP and Ponoi Capital II, LP. David V. Goeddel, a member of our board of directors, is a Managing Partner at The Column Group, LLC and a managing member of Ponoi Management, LLC, general partner of Ponoi Capital, LP, and a managing member of Ponoi II Management, LLC, general partner of Ponoi Capital II, LP.
- (3) Entities affiliated with Topspin Fund, LP holding our securities whose shares are aggregated for purposes of reporting share ownership information include Topspin Fund, LP and Topspin Biotech Fund II, LP.

Series C-2 Convertible Preferred Stock Financing

In December 2018, we issued and sold to investors in a private placement 9,873,412 shares of our Series C-2 convertible preferred stock at a purchase price of \$2.2925 per share for aggregate gross proceeds of approximately \$22.6 million. Between January 2019 and June 2019, we sold additional 6,311,445 shares of Series C-2 convertible preferred stock at a purchase price of \$2.2925 per share for aggregate gross proceeds of approximately \$14.4 million. Each six shares of Series C-2 convertible preferred stock will automatically convert into one share of our common stock upon completion of this offering.

The following table summarizes the Series C-2 convertible preferred stock purchased by directors, executive officers, beneficial owners of more than 5% of our capital stock (on an as-converted basis) or any member of the immediate family of any of the foregoing persons.

Participants	Series C-2 preferred stock	Total purchase price
5% or greater stockholders and directors(1)		
The Regents of the University of California	967,935	\$ 2,218,991
KPCB Holdings, Inc., as nominee	872,410	\$ 2,000,000
Entities affiliated with The Column Group, LLC(2)	1,744,820	\$ 4,000,000

- (1) Additional details regarding these stockholders and their equity holdings are provided in this prospectus under the caption "Principal Stockholders."
- (2) Entities affiliated with The Column Group, LLC holding our securities whose shares are aggregated for purposes of reporting share ownership information include The Column Group, LP, The Column Group II, LP, Ponoi Capital, LP and Ponoi Capital II, LP. David V. Goeddel, a member of our board of directors, is a Managing Partner at The Column Group, LLC and a managing member of Ponoi Management, LLC, general partner of Ponoi Capital, LP, and a managing member of Ponoi II Management, LLC, general partner of Ponoi Capital II, LP.

Investor Rights Agreement

We are party to an amended and restated investor rights agreement ("IRA") with certain holders of our capital stock, including the holders of more than 5% of our outstanding capital stock, such as entities affiliated with KPCB Holdings, Inc., as nominee, entities affiliated with The Column Group, LLC, entities affiliated with Topspin Fund, LP, and The Regents of the University of California. The IRA provides the holders of our convertible preferred stock with certain registration rights, including the right to demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing. The IRA also provides these stockholders with information rights, which will terminate on the closing of this offering, and a right of first refusal with regard to certain issuances of our capital stock, which will not apply to the shares issued pursuant to this offering and which will terminate on the closing of this offering. In connection with this offering, the holders of up to 16,921,931 shares of our common stock issuable on conversion of outstanding preferred stock, as of March 31, 2019, will be entitled to rights with respect to the registration of their shares under the Securities Act under this agreement. For a description of these registration rights, see the section titled "Description of Capital Stock—Registration Rights."

Voting Agreement

We are party to an amended and restated voting agreement under which certain holders of our capital stock, including the holders of more than 5% of our outstanding capital stock, such as entities affiliated with KPCB Holdings, Inc., as nominee, entities affiliated with The Column Group, LLC, entities affiliated with Topspin Fund, LP, and The Regents of the University of California, have agreed as to the manner in which they will vote their shares of our capital stock on certain matters, including with respect to the election of directors. Upon the closing of this offering, the amended and restated voting agreement will terminate, and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors.

Participation in this Offering

Certain existing stockholders have indicated an interest in purchasing up to approximately \$25.0 million of shares of our common stock in this offering at the initial public offering price. However, because these indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any or all of these stockholders, or any or all of these stockholders may determine to purchase more, less or no shares in this offering. The underwriters will receive the same underwriting discount on any shares purchased by these stockholders as they will on any other shares sold to the public in this offering.

Reserved Share Program

At our request, the underwriters have reserved up to 5% of the shares offered by this prospectus, for sale at the initial public offering price in a reserved share program, to our directors, officers, employees, consultants and related persons. See "Underwriting—Reserved Shares."

Indemnification Agreements

Our amended and restated certificate of incorporation that will be in effect upon the closing of this offering will contain provisions limiting the liability of directors, and our amended and restated bylaws that will be in effect on the closing of this offering will provide that we will indemnify each of our directors and officers to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect upon the closing of this offering will also provide our board of directors with discretion to indemnify our employees and other agents when determined appropriate by the board.

In addition, we have entered into an indemnification agreement with each of our directors and executive officers, which requires us to indemnify them. For more information regarding these agreements, see the section titled "Executive Compensation—Limitations of Liability and Indemnification Matters."

Stock Option Grants to Directors and Executive Officers

We have granted stock options to our directors and executive officers, as more fully described in the section titled "Executive Compensation."

Executive Loans

In August 2015, we loaned Dr. Wong, our President and Chief Executive Officer, \$336,600 in connection with his exercise of options to purchase 330,000 shares of our common stock. The loan was evidenced by a limited recourse promissory note, which accrued interest at the rate of 1.82% per annum and was secured by a pledge of such exercised shares. In June 2019, the Company forgave \$353,951, which was the entire amount of principal and accrued interest due on the note, from Dr. Wong.

In June 2016, we loaned Ms. Hemrajani, our then Chief Operating Officer, \$255,000 in connection with her exercise of options to purchase 124,999 shares of our common stock. The loan was evidenced by a limited recourse promissory note, which accrued interest at the rate of 1.41% per annum and was secured by a pledge of such exercised shares. \$17,000 of the note was repaid in connection with our repurchase of 8,333 shares of common stock from her trust in February 2018, and an additional \$109,437.84 of the note was repaid in connection with our repurchase of 53,649 shares of common stock from her trust in March 2019. In April 2019, we and Ms. Hemrajani agreed that the remaining principal and outstanding interest of the note, which was \$133,567 as of March 19, 2019 after reducing accrued interest amount by \$4,669, would be repaid by May 3, 2019 with (i) \$73,005 to be paid in cash and (ii) 29,686 shares of common stock to be returned to us from her trust. The outstanding principal and interest of the note was extinguished in May 2019, as agreed between the parties.

Policies and Procedures for Related Person Transactions

Prior to the closing of this offering, our board of directors will adopt a related person transaction policy setting forth the policies and procedures for the identification, review and approval or ratification of related person transactions. This policy covers, 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 and a related person were or will be participants and the amount involved exceeds \$120,000, including purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness and guarantees of indebtedness. In reviewing and approving any such transactions, our audit committee will consider all relevant facts and circumstances as appropriate, such as the purpose of the transaction, the availability of other sources of comparable products or services, whether the transaction is on terms comparable to those that could be obtained in an arm's length transaction, management's recommendation with respect to the proposed related person transaction, and the extent of the related person's interest in the transaction.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our capital stock as of April 8, 2019, as adjusted to reflect the sale of our common stock offered by us in this offering assuming no exercise of the underwriters' option to purchase additional shares, for:

- each of our named executive officers;
- each of our directors:
- all of our executive officers and directors as a group; and
- · each person or group of affiliated persons known by us to beneficially own more than 5% of our common stock.

We have determined beneficial ownership in accordance with the rules and regulations of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated by the footnotes below, we believe, based on information furnished to us, that the persons and entities named in the table below have sole voting and sole investment power with respect to all shares that they beneficially own, subject to applicable community property laws.

At our request, the underwriters have reserved up to 5% of the shares offered by this prospectus, for sale at the initial public offering price in a reserved share program, to our directors, officers, employees, consultants and related persons. See "Underwriting—Reserved Shares." The following table does not reflect any purchases pursuant to the reserved share program, which purchases, if any, will increase the percentage of shares owned after the offering by such directors, officers, employees, consultants and related persons from that set forth in the table below.

Certain existing stockholders have indicated an interest in purchasing up to approximately \$25.0 million shares of our common stock in this offering at the initial public offering price. However, because these indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any or all of these stockholders, or any or all of these stockholders may determine to purchase more, less or no shares in this offering. The underwriters will receive the same underwriting discount on any shares purchased by these stockholders as they will on any other shares sold to the public in this offering. The following table does not reflect any potential purchases by these stockholders, which purchases, if any, will increase the percentage of shares owned after the offering of such stockholders from that set forth in the table below.

Applicable percentage ownership before the offering is based on 17,750,470 shares of common stock outstanding as of April 8, 2019, assuming the automatic conversion of all outstanding shares of our convertible preferred stock into shares of common stock upon the closing of this offering. Applicable percentage ownership after the offering is based on 22,750,470 shares of common stock outstanding immediately after the closing of this offering, assuming no exercise by the underwriters of their over-allotment option. In computing the number of shares beneficially owned by a person and the percentage ownership of such person, we deemed to be outstanding all shares subject to options held by the person that are currently exercisable, or exercisable within 60 days of April 8, 2019. However, except as described above, we did not deem such shares outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each beneficial owner listed below is c/o RAPT Therapeutics, Inc., 561 Eccles Avenue, South San Francisco, California 94080. We believe, based on information provided to us, that each of the stockholders listed below has sole voting and investment power with respect to the shares

beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

	Shares Ber Owned P Offer	rior to [*]	Shares Beneficially Owned After Offering		
Name of Beneficial Owner	Number	Percentage	Number	Percentage	
5% Stockholders					
Entities affiliated with The Column Group, LLC(1)	6,152,154	34.7%	6,152,154	27.0%	
KPCB Holdings, Inc., as nominee(2)	3,547,064	20.0%	3,547,064	15.6%	
Entities affiliated with Topspin Fund, LP(3)	2,160,372	12.2%	2,160,372	9.5%	
The Regents of the University of California ⁽⁴⁾	1,342,239	7.6%	1,342,239	5.9%	
Directors and Named Executive Officers					
Brian Wong(5)	486,249	2.7%	486,249	2.1%	
Rekha Hemrajani(6)	67,881	*	67,881	*	
William Ho(7)	66,543	*	66,543	*	
David V. Goeddel(1)	6,152,154	34.7%	6,152,154	27.0%	
Linda Kozick(8)	11,631	*	11,631	*	
Michael F. Giordano ⁽⁹⁾	5,555	*	5,555	*	
William Rieflin(10)	81,237	*	81,237	*	
All directors and executive officers as a group (8 persons)(11)	6,898,993	38.45%	6,898,993	30.3%	

^{*} Represents beneficial ownership of less than 1%.

- (1) Consists of (i) 50,000 shares held of record by The Column Group II Management, LP, (ii) 4,357,335 shares held of record by The Column Group II, LP, (iii) 145,401 shares held of record by Ponoi Capital II, LP, and (iv) 1,599,418 shares held of record by Ponoi Capital, LP. David Goeddel is a Managing Partner of The Column Group, LLC, which is the general partner of The Column Group II GP, LP, which is the general partner of The Column Group II, LP. Dr. Goeddel is also a managing member of Ponoi Management, LLC, general partner of Ponoi Capital, LP., and a managing member of Ponoi II Management, LLC, general partner of Ponoi Capital II, LP. Dr. Goeddel may be deemed to share voting and investment power with respect to the shares reported herein and disclaims beneficial ownership of the shares except to the extent of his pecuniary interests therein. The address for the entities listed herein is 1700 Owens Street, Suite 500, San Francisco, CA 94158.
- (2) The shares held for convenience in the name of KPCB Holdings, Inc., as nominee for the accounts of the following entities as follows: 3,444,200 shares held for the account of Kleiner Perkins Caufield & Byers XV, LLC ("KPCB XV") and 102,864 shares held for the account of KPCB XV Founders Fund, LLC ("KPCB XV FF"). The managing member of KPCB XV and KPCB XV FF is KPCB XV Associates, LLC ("KPCB XV Associates"). Beth Seidenberg, L. John Doerr, Randy Komisar, Theodore E. Schlein, Wen Hsieh and William "Bing" Gordon, the managing members of KPCB XV Associates, exercise shared voting and dispositive control over the shares held by KPCB Holdings, Inc. as nominee for the accounts of KPCB XV and KPCB XV FF. The address for KPCB Holdings, Inc., as nominee, is 2750 Sand Hill Road, Menlo Park, CA 94025.
- (3) Consists of (i) 1,641,666 shares held of record by Topspin Biotech Fund II, LP, and (ii) 518,706 shares held of record by Topspin Fund, LP. LG Management, LLC, the general partner of Topspin Fund, LP and Topspin Biotech Fund II, LP, may be deemed to have shared voting control and investment discretion over the shares of common stock held by Topspin Fund, LP and Topspin Biotech Fund II, LP. The address for each entity is 3 Expressway Plaza, Roslyn Heights, NY 11577.
 - Dr. Goeddel disclaims beneficial ownership of the shares except to the extent of his pecuniary interests therein. The address for each entity is 1700 Owens Street, Suite 500, San Francisco, CA 94158.
- (4) The address for The Regents of the University of California is 1111 Broadway Avenue, Oakland, CA 94607.
- (5) Consists of (i) 8,333 shares held by Dr. Wong, (ii) 355,000 shares held by The Wong Family Trust Dated February 4, 2008, for which Dr. Wong is a trustee (of which 20,625 shares were issued pursuant to options

- that were early exercised and are subject to repurchase within 60 days of April 8, 2019), and (iii) 122,916 shares issuable pursuant to stock options exercisable within 60 days of April 8, 2019.
- (6) Consists of (i) 63,020 shares held by The Sanjay Popli & Rekha Hemrajani Revocable Living Trust, for which Ms. Hemrajani is a trustee, and (ii) 4,861 shares issuable pursuant to stock options exercisable within 60 days of April 8, 2019.
- (7) Consists of (i) 52,500 shares held by Dr. Ho (of which 277 shares were issued pursuant to options that were early exercised and are subject to repurchase within 60 days of April 8, 2019), and (ii) 14,043 shares issuable pursuant to stock options exercisable within 60 days of April 8, 2019.
- (8) Consists of 11,631 shares issuable pursuant to stock options exercisable within 60 days of April 8, 2019.
- (9) Consists of 5,555 shares issuable pursuant to stock options exercisable within 60 days of April 8, 2019.
- (10) Consists of (i) 76,724 shares held by Rieflin Family Trust u/a dtd 4/3/00, William J. Rieflin and Prudence H. Rieflin, Trustees, for which Mr. Rieflin is co-Trustee, and (ii) 4,513 shares issuable pursuant to stock options exercisable within 60 days of April 8, 2019.
- (11) Consists of (i) 6,707,731 shares beneficially owned by our directors (or their affiliated entities) and executive officers and (ii) 231,018 shares issuable pursuant to stock options exercisable within 60 days of April 8, 2019.

DESCRIPTION OF CAPITAL STOCK

General

The following is a summary of the rights of our common and preferred stock and some of the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will each become effective upon the closing of this offering, our investor rights agreement and relevant provisions of the Delaware General Corporation Law ("DGCL"). The descriptions herein are qualified in their entirety by our amended and restated certificate of incorporation, amended and restated bylaws and investor rights agreement, copies of which have been filed as exhibits to the registration statement of which this prospectus is a part, as well as the relevant provisions of the DGCL.

Upon the closing of this offering and the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of 550,000,000 shares, all with a par value of \$0.0001 per share, of which:

- 500,000,000 shares are designated as common stock; and
- 50,000,000 shares are designated as preferred stock.

Common Stock

As of March 31, 2019, there were 17,750,380 shares of our common stock outstanding and held of record by 129 stockholders, assuming the automatic conversion of all outstanding shares of our convertible preferred stock into shares of common stock, which will automatically occur immediately prior to the closing of this offering.

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders, including the election of directors, and do not have cumulative voting rights. Accordingly, the holders of a majority of the outstanding shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they so choose, other than any directors that holders of any preferred stock we may issue may be entitled to elect. Subject to preferences that may be applicable to any then outstanding preferred stock, holders of common stock are entitled to receive ratably those dividends, if any, as may be declared by the board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, the holders of common stock will be entitled to share ratably in the assets legally available for distribution to stockholders after the payment of or provision for all of our debts and other liabilities, subject to the prior rights of any preferred stock then outstanding. Holders of common stock have no preemptive or conversion rights or other subscription rights and there are no redemption or sinking funds provisions applicable to the common stock. All outstanding shares of common stock are, and the common stock to be outstanding upon the closing of this offering will be, duly authorized, validly issued, fully paid and nonassessable. All authorized but unissued shares of our common stock will be available for issuance by our board of directors without any further stockholder action, except as required by the listing standards of Nasdaq. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred Stock

As of March 31, 2019, there were 16,921,931 shares of convertible preferred stock outstanding. Immediately upon the closing of this offering, each outstanding share of convertible preferred stock will automatically convert into one share of common stock, and no shares of preferred stock will be outstanding.

Upon the closing of this offering, our board of directors may, without further action by our stockholders, fix the rights, preferences, privileges and restrictions of up to an aggregate of 50,000,000 shares of convertible preferred stock in one or more series and authorize their issuance. 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 any series or the designation of such series, any or all of which may be greater than the rights of our common stock. The issuance of our convertible preferred stock could adversely affect the voting power of holders of our common stock, and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control or other corporate action.

Options

As of March 31, 2019, we had outstanding options under our equity compensation plans to purchase an aggregate of 971,496 shares of our common stock with a weighted-average exercise price of \$4.99 per share.

Registration Rights

We are party to an amended and restated investor rights agreement that provides that certain stockholders, including certain holders of common stock issuable upon the conversion of our convertible preferred stock, including certain holders of at least 5% of our outstanding capital stock, have certain registration rights as set forth below. The registration of shares of our common stock by the exercise of registration rights described below would enable the holders to sell these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts and commissions, of the shares registered pursuant to the demand, piggyback and Form S-3 registration rights described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit the number of shares such holders may include. The demand, piggyback and Form S-3 registration rights described below will expire three years after the closing of this offering, of which this prospectus is a part, or with respect to any particular stockholder, such time after the closing of this offering that such stockholder holds less than 1% of our outstanding common stock (including all shares of preferred stock on an as-converted basis) and such stockholder can sell all of its shares entitled to registration rights under Rule 144 of the Securities Act during any 90-day period.

Demand Registration Rights

The holders of an aggregate of 16,921,931 shares of our common stock as of March 31, 2019, including shares of common stock issuable upon the conversion of our convertible preferred stock, will be entitled to certain demand registration rights. At any time beginning the six months after the effective date of this offering, the holders of at least 30% of these shares may request that we register all or a portion of their shares. We are obligated to effect only two such registrations. Such request for registration must cover shares with an anticipated aggregate offering price, net of underwriting discounts and commissions, of at least \$20 million.

Piggyback Registration Rights

In connection with this offering, the holders of an aggregate of 16,921,931 shares of our common stock as of March 31, 2019, including shares of common stock issuable upon the conversion of our convertible preferred stock, were entitled to, and the necessary percentage of holders waived, their rights to notice of this offering and to include their shares of registrable securities in this offering. After this offering, in the event that we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders, the holders of these shares 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 (i) a registration statement relating to any employee benefit plans, (ii) a registration relating to a corporate reorganization or other Rule 145 transaction, (iii) a registration relating to stock issued upon conversion of debt securities, or (iv) a registration on any registration form that does not permit secondary sales, the holders of these shares are entitled to notice of the registration and have the right to include their shares in the registration, subject to limitations that the underwriters may impose on the number of shares included in the offering.

Form S-3 Registration Rights

The holders of an aggregate of 16,921,931 shares of common stock as of March 31, 2019, including shares of common stock issuable upon the conversion of our convertible preferred stock, will be entitled to certain Form S-3 registration rights. The holders of these shares can make a request that we register their shares on Form S-3 if we are qualified to file a registration statement on Form S-3 and if the reasonably anticipated aggregate gross proceeds of the shares offered would equal or exceed \$5 million. We will not be required to effect more than two registrations on Form S-3 within any 12-month period.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Some provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws contain or will contain provisions that could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the 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 which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended 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 the 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.

Stockholder Meetings

Our amended and restated bylaws will provide that a special meeting of stockholders may be called only by our chair of the board, chief executive officer or president, or by a resolution adopted by a majority of our board of directors.

Requirements for Advance Notification of Stockholder Nominations and Proposals

Our amended and restated bylaws will establish advance notice procedures with respect to stockholder proposals to be brought before a stockholder meeting 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 amended and restated bylaws will eliminate the right of stockholders to act by written consent without a meeting.

Staggered Board

Our board of directors will be 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. For more information on the classified board, see "Management—Board Composition and Election of Directors." This system of electing and removing directors 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.

Removal of Directors

Our amended and restated certificate of incorporation will provide that no member of our board of directors may be removed from office by our stockholders except for cause and, in addition to any other vote required by law, upon the approval of not less than two thirds of the total voting power of all of our outstanding voting stock then entitled to vote in the election of directors.

Stockholders Not Entitled to Cumulative Voting

Our amended and restated certificate of incorporation will not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the outstanding shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they choose, other than any directors that holders of our preferred stock may be entitled to elect.

Delaware Anti-Takeover Statute

We are subject to Section 203 of the DGCL, which prohibits persons deemed to be "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, 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.

Choice of Forum

Our amended and restated certificate of incorporation to be in effect upon the completion of this offering will provide that the Court of Chancery of the State of Delaware will be the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a breach of fiduciary duty owed by any of our directors, officers, employees or agents to us or our stockholders; (3) any action asserting a claim against us or any of our directors, officers or other employees arising pursuant to any provisions of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws; or (4) any action asserting a claim against us or any of our directors, officers or other employees that is governed by the internal affairs doctrine. These provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act or the rules and regulations thereunder. However, these provisions apply to Securities Act claims and Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce a duty or liability created by the Securities Act or the rules and regulations thereunder. Accordingly, there is uncertainty as to whether a court would enforce such provisions, and our stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Our amended and restated certificate of incorporation to be in effect upon the completion of this offering will further provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision.

These exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. If a court were to find the exclusive-forum provisions in our amended and restated certificate of incorporation that will be in effect upon the closing of this offering to be inapplicable or unenforceable, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business. For example, the Court of Chancery of the State of Delaware recently determined that a provision stating that U.S. federal district courts are the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act is not enforceable. However, this decision may be reviewed and ultimately overturned by the Delaware Supreme Court. If the Court of Chancery's decision were to be overturned, we would seek to enforce the federal district court exclusive forum provision in our amended and restated certificate of incorporation.

Amendment of Charter Provisions

The amendment of any of the above provisions, except for the provision making it possible for our board of directors to issue preferred stock, would require approval by holders of at least two-thirds of the total voting power of all of our outstanding voting stock.

The provisions of Delaware 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 the composition of our board and 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.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock upon the closing of this offering will be American Stock Transfer & Trust Company, LLC.

Exchange Listing

Our common stock is currently not listed on any securities exchange. We have applied to have our common stock listed on the Nasdaq Global Market ("Nasdaq"), under the symbol "RAPT."

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock. Although we have applied to have our common stock listed on Nasdaq, we cannot assure you that there will be an active public market for our common stock.

Following the closing of this offering, based on the number of shares of our common stock outstanding as of March 31, 2019 and assuming (1) the issuance of shares of common stock in this offering, (2) the conversion of all outstanding shares of our convertible preferred stock into shares of our common stock, which will automatically occur immediately prior to the closing of the offering, and (3) no exercise of the underwriters' overallotment option, we will have an aggregate of approximately 22,750,380 shares of common stock outstanding.

Of these shares, all shares of common stock sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares of common stock purchased by our "affiliates," as that term is defined in Rule 144 under the Securities Act or any shares subject to lock-up agreements. Shares purchased by our affiliates would be subject to the Rule 144 resale restrictions described below, other than the holding period requirement.

The remaining shares of common stock outstanding after this offering will be "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, each of which is summarized below. We expect that all of these shares will be subject to a 180-day lock-up period under the lock-up and market stand-off agreements described below.

We may issue shares of common stock from time to time as consideration for future acquisitions, investments or other corporate purposes. In the event any such acquisition, investment or other transaction is significant, the number of shares of common stock that we may issue may also be significant. We may also grant registration rights covering those shares of common stock issued in connection with any such acquisition, investment or other transaction.

In addition, shares of common stock that are either subject to outstanding options or warrants 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 described below and Rules 144 and 701 under the Securities Act.

Lock-Up Agreements

We, along with our directors, executive officers and substantially all of our other stockholders and optionholders, have agreed with the underwriters that for a period of 180 days after the date of this prospectus, subject to specified exceptions as detailed further in "Underwriters" below, we or they will not, except with the prior written consent of the representatives, offer, pledge, sell or 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 dispose of or transfer any shares our common stock or any securities convertible into or exercisable for shares of our common stock; request or demand that we file or make a confidential submission of a registration statement related to our common stock; or enter into any swap or other agreement or transaction that transfers to another, in whole or in part, directly or indirectly, the economic consequence of ownership of our common stock. All of our stockholders are subject to a market stand-off agreement with us which imposes similar restrictions.

Upon expiration of the lock-up period, certain of our stockholders will have the right to require us to register their shares under the Securities Act. See "—Registration Rights" below and "Description of Capital Stock—Registration Rights."

Upon the expiration of the lock-up period, substantially all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above.

Rule 144

In general, under Rule 144 as currently in effect, once we have been subject to public company reporting requirements of Section 13 or Section 15(d) of the Exchange Act for at least 90 days, an eligible stockholder is entitled to sell such shares without complying with the manner of sale, volume limitation or notice provisions of Rule 144, subject to compliance with the public information requirements of Rule 144. To be an eligible stockholder under Rule 144, such stockholder must not be deemed to have been one of our affiliates for purposes of the Securities Act at any time during the 90 days preceding a sale and must have beneficially owned the shares proposed to be sold for at least six months, including the holding period of any prior owner other than our affiliates. 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 our affiliates, then such person is entitled to sell such shares without complying with any of the requirements of Rule 144, subject to the expiration of the lock-up agreements described above.

In general, under Rule 144, as currently in effect, our affiliates or persons selling shares on behalf of our affiliates are entitled to sell shares on expiration of the lock-up agreements described above. Beginning 90 days after the date of this prospectus, within any three-month period, such stockholders may sell a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 227,504 shares immediately after this offering; or
- the average weekly trading volume in our common stock on Nasdaq during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

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 and notice requirements and to the availability of current public information about us.

Rule 701

Rule 701 generally allows a stockholder who was issued shares under a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days, to sell these shares in reliance on Rule 144, but without being required to comply with the public information, holding period, volume limitation or notice provisions of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. All holders of Rule 701 shares, however, are required by that rule to wait until 90 days after the date of this prospectus before selling those shares under Rule 701, subject to the expiration of the lock-up agreements described above.

Form S-8 Registration Statement

We intend to file one or more registration statements on Form S-8 under the Securities Act to register all shares of common stock subject to outstanding stock options and common stock issued or issuable under the 2015 Plan, the 2019 Plan and the ESPP. We expect to file the registration statement covering shares offered pursuant to these stock plans shortly after the date of this prospectus, permitting the resale of such shares by non-affiliates in the public market without restriction under the Securities Act and the sale by affiliates in the public market subject to compliance with the resale provisions of Rule 144.

Registration Rights

As of March 31, 2019, holders of up to 16,921,931 shares of our common stock, which includes all of the shares of common stock issuable upon the automatic conversion of our convertible preferred stock immediately prior to the closing of this offering, or their transferees, will be entitled to various rights with respect to the registration of these shares under the Securities Act upon the closing of this offering and the expiration of lock-up agreements. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by affiliates. See "Description of Capital Stock—Registration Rights" for additional information. Shares covered by a registration statement will be eligible for sale in the public market upon the expiration or release from the terms of the lock-up agreement.

MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS OF OUR COMMON STOCK

The following summary describes the material U.S. federal income tax consequences of the acquisition, ownership and disposition of our common stock acquired in this offering by Non-U.S. Holders (as defined below). This discussion is not a complete analysis of all potential U.S. federal income tax consequences relating thereto, and does not deal with foreign, state and local consequences that may be relevant to Non-U.S. Holders in light of their particular circumstances, nor does it address U.S. federal tax consequences (such as gift and estate taxes) other than income taxes. Special rules different from those described below may apply to certain Non-U.S. Holders that are subject to special treatment under the Internal Revenue Code of 1986, as amended (the "Code"), such as financial institutions, insurance companies, tax-exempt organizations, broker-dealers and traders in securities, U.S. expatriates, "controlled foreign corporations," "passive foreign investment companies," corporations that accumulate earnings to avoid U.S. federal income tax, corporations organized outside of the United States, any state thereof or the District of Columbia that are nonetheless treated as U.S. taxpayers for U.S. federal income tax purposes, persons that hold our common stock as part of a "straddle," "hedge," "conversion transaction," "synthetic security" or integrated investment or other risk reduction strategy, persons who acquire our common stock through the exercise of an option or otherwise as compensation, persons subject to the alternative minimum tax or federal Medicare contribution tax on net investment income, persons subject to special tax accounting rules under Section 451(b) of the Code, "qualified foreign pension funds" as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds, partnerships and other pass-through entities or arrangements, and investors in such pass-through entities or arrangements. Such Non-U.S. Holders are urged to consult their own tax advisors to determine the U.S. federal, state, local and other tax consequences that may be relevant to them. Furthermore, the discussion below is based upon the provisions of the Code, and Treasury Regulations, rulings and judicial decisions thereunder as of the date hereof, and such authorities may be repealed, revoked or modified, perhaps retroactively, so as to result in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the U.S. Internal Revenue Service (the "IRS") with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS will agree with such statements and conclusions. This discussion assumes that the Non-U.S. Holder holds our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment).

This discussion is for informational purposes only and is not tax advice. Persons considering the purchase of our common stock pursuant to this offering should consult their own tax advisors concerning the U.S. federal income, estate and other tax consequences of acquiring, owning and disposing of our common stock in light of their particular situations as well as any consequences arising under the laws of any other taxing jurisdiction, including any state, local or foreign tax consequences.

For the purposes of this discussion, a "Non-U.S. Holder" is, for U.S. federal income tax purposes, a beneficial owner of common stock that is neither a U.S. Holder, nor a partnership (or other entity treated as a partnership for U.S. federal income tax purposes regardless of its place of organization or formation). A "U.S. Holder" means a beneficial owner of our common stock that is for U.S. federal income tax purposes any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation or other entity treated as a corporation for U.S. federal income tax purposes created or organized in or under the laws of the U.S., any state thereof or the District of Columbia;
- · an estate the income of which is subject to U.S. federal income taxation regardless of its source; or
- a trust if it (1) is subject to the primary supervision of a court within the U.S. and one or more U.S. persons have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

Distributions

Distributions, if any, made on our common stock to a Non-U.S. Holder to the extent made out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles) generally will constitute dividends for U.S. tax purposes and will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty, subject to the discussions below regarding effectively connected income, backup withholding and foreign accounts. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide us or our paying agent with a properly executed IRS Form W-8BEN (in the case of individuals) or IRS Form W-8BEN-E (in the case of entities), or other appropriate form, certifying the Non-U.S. Holder's entitlement to benefits under that treaty. This certification must be provided to us or our paying agent prior to the payment of dividends and must be updated periodically. In the case of a Non-U.S. Holder that is an entity, Treasury Regulations and the relevant tax treaty provide rules to determine whether, for purposes of determining the applicability of a tax treaty, dividends will be treated as paid to the entity or to those holding an interest in that entity. If a Non-U.S. Holder holds stock through a financial institution or other agent acting on the holder's behalf, the holder will be required to provide appropriate documentation to such agent. The holder's agent will then be required to provide certification to us or our paying agent, either directly or through other intermediaries. If you are eligible for a reduced rate of U.S. federal withholding tax under an income tax treaty and you do not timely file the required certification, you may be able to obtain a refund or credit of any excess amounts withheld by timely filing an appropriate claim for a refund with the IRS.

We generally are not required to withhold tax on dividends paid to a Non-U.S. Holder that 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, are attributable to a permanent establishment or fixed base that such holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us or our paying agent (or, if stock is held through a financial institution or other agent, to such agent). In general, such effectively connected dividends will be subject to U.S. federal income tax, on a net income basis at the regular rates applicable to U.S. residents. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional "branch profits tax," which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder's effectively connected earnings and profits, subject to certain adjustments. Non-U.S. Holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

To the extent distributions on our common stock, if any, exceed our current and accumulated earnings and profits, they will first reduce the Non-U.S. Holder's adjusted basis in our common stock, but not below zero, and then will be treated as gain to the extent of any excess amount distributed, and taxed in the same manner as gain realized from a sale or other disposition of common stock as described in the next section.

Gain on Disposition of Our Common Stock

Subject to the discussions below regarding backup withholding and foreign accounts, a Non-U.S. Holder generally will not be subject to U.S. federal income tax with respect to gain realized on a sale or other disposition of our common stock unless (a) the gain is effectively connected with a trade or business of such holder in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment or fixed base that such holder maintains in the United States), (b) the Non-U.S. Holder is a nonresident alien individual and is present in the United States for 183 or more days in the taxable year of the disposition and certain other conditions are met or (c) we are or have been a "United States real property holding corporation" within the meaning of Code Section 897(c)(2) at any time within the shorter of the five-year period preceding such disposition or such holder's holding period. In general, we would be a United States real property holding corporation if our interests in U.S. real estate comprise (by fair market value) at least half of our business assets. We believe that we have not been and we are not, and do not anticipate becoming, a United States real

property holding corporation. Even if we are treated as a United States real property holding corporation, gain realized by a Non-U.S. Holder on a disposition of our common stock will not be subject to U.S. federal income tax so long as (1) the Non-U.S. Holder owned, directly, indirectly and constructively, no more than 5% of our common stock at all times within the shorter of (i) the five-year period preceding the disposition or (ii) the holder's holding period and (2) our common stock is regularly traded on an established securities market. There can be no assurance that our common stock will continue to qualify as regularly traded on an established securities market. If any gain on your disposition is taxable because we are a United States real property holding corporation and your ownership of our common stock exceeds 5%, you will be taxed on such disposition generally in the manner as gain that is effectively connected with the conduct of a U.S. trade or business (subject to the provisions under an applicable income tax treaty), except that the branch profits tax generally will not apply.

If you are a Non-U.S. Holder described in (a) above, you will be required to pay tax on the net gain derived from the sale at regular U.S. federal income tax rates, and corporate Non-U.S. Holders described in (a) above may be subject to the additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. Gain described in (b) above will be subject to U.S. federal income tax at a flat 30% rate or such lower rate as may be specified by an applicable income tax treaty, which gain may be offset by certain U.S.-source capital losses (even though you are not considered a resident of the United States), provided that the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

Information Reporting Requirements and Backup Withholding

Generally, we must report information to the IRS with respect to any dividends we pay on our common stock (even if the payments are exempt from withholding), including the amount of any such dividends, the name and address of the recipient, and the amount, if any, of tax withheld. A similar report is sent to the holder to whom any such dividends are paid. Pursuant to tax treaties or certain other agreements, the IRS may make its reports available to tax authorities in the recipient's country of residence.

Dividends paid by us (or our paying agents) to a Non-U.S. Holder may also be subject to U.S. backup withholding. U.S. backup withholding generally will not apply to a Non-U.S. Holder who provides a properly executed IRS Form W-8BEN, IRS Form W-8BEN-E or IRS Form W-ECI, or otherwise establishes an exemption. Notwithstanding the foregoing, backup withholding may apply if the payor has actual knowledge, or reason to know, that the holder is a U.S. person who is not an exempt recipient.

U.S. information reporting and backup withholding requirements generally will apply to the proceeds of a disposition of our common stock effected by or through a U.S. office of any broker, U.S. or foreign, except that information reporting and such requirements may be avoided if the holder provides a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E or otherwise meets documentary evidence requirements for establishing non-U.S. person status or otherwise establishes an exemption. Generally, U.S. information reporting and backup withholding requirements will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a non-U.S. broker. Information reporting and backup withholding requirements may, however, apply to a payment of disposition proceeds if the broker has actual knowledge, or reason to know, that the holder is, in fact, a U.S. person. For information reporting purposes, certain brokers with substantial U.S. ownership or operations will generally be treated in a manner similar to U.S. brokers.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be credited against the tax liability of persons subject to backup withholding, provided that the required information is timely furnished to the IRS.

Foreign Accounts

Sections 1471 through 1474 of the Code (commonly referred to as FATCA) impose a U.S. federal withholding tax of 30% on certain payments, including dividends paid on and the gross proceeds of a disposition

of our common stock paid to a foreign financial institution (as specifically defined by applicable rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities substantial information regarding U.S. account holders of such institution (which includes certain equity holders of such institution, as well as certain account holders that are foreign entities with U.S. owners). FATCA also generally imposes a federal withholding tax of 30% on certain payments, including dividends paid on and the gross proceeds of a disposition of our common stock to a non-financial foreign entity unless such entity provides the withholding agent with either a certification that it does not have any substantial direct or indirect U.S. owners or provides information regarding substantial direct and indirect U.S. owners of the entity. An intergovernmental agreement between the United States and an applicable foreign country may modify those requirements. The withholding tax described above will not apply if the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from the rules.

The withholding provisions described above currently apply to payments of dividends, and, subject to the recently released proposed Treasury Regulations described below, will apply to payments of gross proceeds from a sale or other disposition of common stock on or after January 1, 2019.

The U.S. Treasury Department recently released proposed regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a disposition of our common stock. In its preamble to such proposed regulations, the U.S. Treasury Department stated that taxpayers may generally rely on the proposed regulations until final regulations are issued.

Holders are encouraged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in our common stock.

EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR REGARDING THE TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK, INCLUDING THE CONSEQUENCES OF ANY RECENT OR PROPOSED CHANGE IN APPLICABLE LAW.

UNDERWRITING

BofA Securities, Inc., Wells Fargo Securities, LLC, BMO Capital Markets Corp. and UBS Securities LLC are acting as representatives of each of the underwriters named below. Subject to the terms and conditions set forth in an underwriting agreement among us and the underwriters, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the number of shares of common stock set forth opposite its name below.

<u>Underwriter</u> BofA Securities, Inc.	Number of Shares
Wells Fargo Securities, LLC	
BMO Capital Markets Corp.	
UBS Securities LLC	
Total	5,000,000

Subject to the terms and conditions set forth in the underwriting agreement, the underwriters have agreed, severally and not jointly, to purchase all of the shares sold under the underwriting agreement if any of these shares are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the shares, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the shares, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officer's certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commissions and Discounts

The representatives have advised us that the underwriters propose initially to offer the shares to the public at the public offering price set forth on the cover page of this prospectus and to dealers at that price less a concession not in excess of \$ per share. After the initial offering, the public offering price, concession or any other term of the offering may be changed.

The following table shows the public offering price, underwriting discount and proceeds before expenses to us. The information assumes either no exercise or full exercise by the underwriters of their option to purchase additional shares.

	Per Share	Without Option	With Option
Public offering price	\$	\$	\$
Underwriting discount	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

The expenses of the offering, not including the underwriting discount, are estimated at \$3.8 million and are payable by us. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority up to \$50,000.

Option to Purchase Additional Shares

We have granted an option to the underwriters, exercisable for 30 days after the date of this prospectus, to purchase up to 750,000 additional shares of our common stock at the public offering price, less the underwriting discount. If the underwriters exercise this option, each will be obligated, subject to conditions contained in the underwriting agreement, to purchase a number of additional shares proportionate to that underwriter's initial amount reflected in the above table.

Reserved Share Program

At our request, the underwriters have reserved up to 5% of the shares offered by this prospectus, for sale at the initial public offering price in a reserved share program, to our directors, officers, employees, consultants and related persons. If these persons purchase reserved shares, this will reduce the number of shares available for sale to the general public. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same terms as the other shares offered by this prospectus. Participants in the reserved share program will not be subject to lockup or market standoff restrictions with the underwriters or with us with respect to any shares purchased through the reserved share program, except in the case of shares purchased by any director or executive officer.

No Sales of Similar Securities

We, our executive officers and directors and our other existing security holders have agreed not to sell or transfer any common stock or securities convertible into, exchangeable for, exercisable for, or repayable with common stock, for the period ending 180 days after the date of this prospectus without first obtaining the written consent of the representatives. Specifically, we and these other persons have agreed, with certain limited exceptions, not to directly or indirectly:

- offer, pledge, sell or contract to sell any common stock,
- sell any option or contract to purchase any common stock,
- · purchase any option or contract to sell any common stock,
- grant any option, right or warrant to purchase any common stock,
- · otherwise dispose of or transfer any common stock,
- · request or demand that we file or make a confidential submission of a registration statement related to the common stock or
- enter into any swap or other agreement or any transaction that transfers in whole or in part, directly or indirectly, the economic
 consequence of ownership of any common stock whether any such swap or transaction is to be settled by delivery of shares or other
 securities, in cash or otherwise.

The exceptions permit our executive officers and directors and other existing security holders, subject to certain restrictions, to:

• transfer the common stock (i) as a bona fide gift or gifts, (ii) to the person's immediate family or any trust for the direct or indirect benefit of the person or their immediate family, (iii) as a distribution to the person's limited partners or stockholders, (iv) to the person's affiliates or any investment fund or other entity controlled or managed by the person, or (v) by will of intestate successor.

- transfer the common stock to us upon exercise of any option granted under our incentive plans described in this prospectus, including the surrender of shares of common stock to us in "net" or "cashless" exercise of any option;
- transfer the common stock to us in connection with our repurchase of shares of common stock pursuant to a repurchase right arising upon the termination of the person's employment with us;
- convert our preferred stock into shares of common stock;
- transfer the common stock pursuant to an order of a court of competent jurisdiction or in connection with a qualified domestic order or divorce settlement;
- establishing a trading plan pursuant to Rule 10b5-1 under the Exchange Act, provided that no sales of common stock are made under such plans during the restricted period; or
- sell shares of our common stock purchased in the initial public offering or on the open market following the initial public offering.

This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for or repayable with common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Nasdaq Global Market Listing

We expect the shares to be approved for listing on the Nasdaq Global Market, subject to notice of issuance, under the symbol "RAPT."

Before this offering, there has been no public market for our common stock. The initial public offering price will be determined through negotiations among us and the representatives. In addition to prevailing market conditions, the factors to be considered in determining the initial public offering price are:

- the valuation multiples of publicly traded companies that the representatives believe to be comparable to us,
- · our financial information,
- · the history of, and the prospects for, our company and the industry in which we compete,
- · an assessment of our management, its past and present operations, and the prospects for, and timing of, our future revenues,
- the present state of our development, and
- · the above factors in relation to market values and various valuation measures of other companies engaged in activities similar to ours.

An active trading market for the shares may not develop. It is also possible that after the offering the shares will not trade in the public market at or above the initial public offering price.

The underwriters do not expect to sell more than 5% of the shares in the aggregate to accounts over which they exercise discretionary authority.

Price Stabilization, Short Positions and Penalty Bids

Until the distribution of the shares is completed, SEC rules may limit underwriters from bidding for and purchasing our common stock. However, the representatives may engage in transactions that stabilize the price of the common stock, such as bids or purchases to peg, fix or maintain that price.

In connection with the offering, the underwriters may purchase and sell our common stock in the open market. These transactions may include short sales, purchases on the open market to cover positions created by short sales and stabilizing transactions. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares described above. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option granted to them. "Naked" short sales are sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. 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 our common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of shares of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Similar to other purchase transactions, the underwriters' purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. The underwriters may conduct these transactions on the Nasdaq Global Market, in the over-the-counter market or otherwise.

Neither we nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. In addition, neither we nor any of the underwriters make any representation that the representatives will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Electronic Distribution

In connection with the offering, certain of the underwriters or securities dealers may distribute prospectuses by electronic means, such as email.

Other Relationships

Some of the underwriters and their affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. They have received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of their business activities, the underwriters and their affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The underwriters and their affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

European Economic Area

In relation to each member state of the European Economic Area, no offer of ordinary shares which are the subject of the offering has been or will be made to the public in that Member State, other than under the following exemptions under the Prospectus Directive:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of ordinary shares referred to in (a) to (c) above shall result in a requirement for the Company or any representative to publish a prospectus pursuant to Article 3 of the Prospectus Directive, or supplement a prospectus pursuant to Article 16 of the Prospectus Directive.

Each person located in a Member State to whom any offer of ordinary shares is made or who receives any communication in respect of an offer of ordinary shares, or who initially acquires any ordinary shares will be deemed to have represented, warranted, acknowledged and agreed to and with each representative and the Company that (1) it is a "qualified investor" within the meaning of the law in that Member State implementing Article 2(1)(e) of the Prospectus Directive; and (2) in the case of any ordinary shares acquired by it as a financial intermediary as that term is used in Article 3(2) of the Prospectus Directive, the ordinary shares acquired by it in the offer have not been acquired on behalf of, nor have they been acquired with a view to their offer or resale to, persons in any Member State other than qualified investors, as that term is defined in the Prospectus Directive, or in circumstances in which the prior consent of the representatives has been given to the offer or resale; or where ordinary shares have been acquired by it on behalf of persons in any Member State other than qualified investors, the offer of those ordinary shares to it is not treated under the Prospectus Directive as having been made to such persons.

The Company, the representatives and their respective affiliates will rely upon the truth and accuracy of the foregoing representations, acknowledgments and agreements.

This prospectus has been prepared on the basis that any offer of shares in any Member State will be made pursuant to an exemption under the Prospectus Directive from the requirement to publish a prospectus for offers of shares. Accordingly any person making or intending to make an offer in that Member State of shares which are the subject of the offering contemplated in this prospectus may only do so in circumstances in which no obligation arises for the Company or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Directive in relation to such offer. Neither the Company nor the representatives have authorized, nor do they authorize, the making of any offer of shares in circumstances in which an obligation arises for the Company or the representatives to publish a prospectus for such offer.

For the purposes of this provision, the expression an "offer of ordinary shares to the public" in relation to any ordinary 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 the ordinary shares to be offered so as to enable an investor to decide to purchase or subscribe the ordinary shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended) and includes any relevant implementing measure in each Member State.

The above selling restriction is in addition to any other selling restrictions set out below.

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 Directive) (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 (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"). This document must not be acted on or relied on in the United Kingdom by persons who are not relevant persons. In the United Kingdom, any investment or investment activity to which this document relates is only available to, and will be engaged in with, relevant persons.

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 ("SIX") or on any other stock exchange or regulated trading facility in Switzerland. This document 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, nor 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 FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("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

This prospectus relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority ("DFSA"). This prospectus is intended for distribution only to persons of a type specified in the Offered Securities Rules 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 nor taken steps to verify the information set forth herein and has no responsibility for the prospectus. The shares to which this prospectus relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this prospectus you should consult an authorized financial advisor.

Notice to Prospective Investors in Australia

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission ("ASIC"), in relation to the offering. This prospectus does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the "Corporations Act"), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the "Exempt Investors") who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional

investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This prospectus contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this prospectus is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

Notice to Prospective Investors in Hong Kong

The securities 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 Hong Kong and any rules made under that Ordinance; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance. No advertisement, invitation or document relating to the securities has been or may be insued 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 securities which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Notice to Prospective Investors in Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) and, accordingly, will not be offered or sold, directly or indirectly, in Japan, or for the benefit of any Japanese Person or to others for re-offering or resale, directly or indirectly, in Japan or to any Japanese Person, except in compliance with all applicable laws, regulations and ministerial guidelines promulgated by relevant Japanese governmental or regulatory authorities in effect at the relevant time. For the purposes of this paragraph, "Japanese Person" shall mean any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

Notice to Prospective Investors in Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of securities may not be circulated or distributed, nor may the securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA"), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the securities 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 (as defined in Section 239(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 securities pursuant to an offer made under Section 275 of the SFA except:

- (c) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (d) where no consideration is or will be given for the transfer;
- (e) where the transfer is by operation of law;
- (f) as specified in Section 276(7) of the SFA; or
- (g) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Notice to Prospective Investors in Canada

The securities 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 securities 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 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) 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.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by Cooley LLP, Palo Alto, California. The underwriters are being represented by Davis Polk & Wardwell LLP, Menlo Park, California.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements at December 31, 2017 and 2018, and for the years then ended, as set forth in their report. We have included our financial statements in the prospectus and elsewhere in the registration statement in reliance on Ernst & Young LLP's report, given on their authority 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, including exhibits and schedules, under the Securities Act, with respect to the shares of common stock being offered by this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the internet at the SEC's website at www.sec.gov.

Upon the closing of this offering, we will be subject to the information reporting requirements of the Securities Exchange Act of 1934 and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available for inspection at the website of the SEC referred to above. We also maintain a website at www.rapt.com, at which, following the closing of this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

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Years ended December 31, 2017 and 2018

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of RAPT Therapeutics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of RAPT Therapeutics, Inc. (f/k/a FLX, Bio, Inc.) (the Company) as of December 31, 2017 and 2018, the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit, and cash flows for the years then ended, and 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 at December 31, 2017 and 2018, and the results of its operations and its cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's 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 in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2017.

Redwood City, California May 24, 2019

except for the retroactive effect of the 1-for-6 reverse stock split as described in Note 2, as to which the date is July 22, 2019

RAPT THERAPEUTICS, INC. CONSOLIDATED BALANCE SHEETS (In thousands, except share and per share data)

	<u>Decent</u> 2017	aber 31, 2018	Pro forma Stockholders' Equity as of December 31, 2018 (Unaudited)
Assets			,
Current assets:			
Cash and cash equivalents	\$ 47,517	\$ 63,798	
Prepaid expenses and other current assets	725	1,264	
Total current assets	48,242	65,062	
Property and equipment, net	1,913	4,159	
Other assets	236	389	
Total assets	\$ 50,391	\$ 69,610	
Liabilities, Convertible Preferred Stock and Stockholders' Deficit			
Current liabilities:			
Accounts payable	\$ 1,106	\$ 1,771	
Accrued expenses	1,492	2,488	
Other current liabilities	650	384	
Total current liabilities	3,248	4,643	
Deferred rent, net of current portion	905	969	
Commitments (See Note 6)			
Convertible preferred stock, \$0.0001 par value: 104,018,468 shares authorized; 75,563,784 and 98,491,880 shares issued and outstanding at December 31, 2017 and 2018, respectively; aggregate liquidation preference of \$170,000 at December 31, 2018; no shares issued and outstanding, pro forma (unaudited)	108,643	161,111	\$ —
Stockholders' Deficit			
Common stock, \$0.0001 par value: 119,200,000 shares authorized; 880,191 and 878,413 shares issued and outstanding at December 31, 2017 and 2018, respectively; 17,293,694 shares issued and outstanding as of			
December 31, 2018, pro forma (unaudited)	1	1	2
Additional paid-in capital	21,005	22,441	183,551
Related party promissory note for the purchase of common stock	(605)	(598)	(598)
Accumulated other comprehensive loss	_	(4)	(4)
Accumulated deficit	(82,806)	(118,953)	(118,953)
Total stockholders' (deficit) equity	(62,405)	(97,113)	\$ 63,998
Total liabilities, convertible preferred stock and stockholders' deficit	\$ 50,391	\$ 69,610	

RAPT THERAPEUTICS, INC. CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (In thousands, except share and per share data)

	Year Ended	Decem	
	<u>2017</u>		<u>2018</u>
Operating expenses:			
Research and development	\$ 25,618	\$	31,767
General and administrative	3,713		5,180
Total operating expenses	29,331		36,947
Loss from operations	29,331		36,947
Other (income)			
Other (income), net	(216)		(800)
Net loss	\$ 29,115	\$	36,147
Other comprehensive loss			4
Total comprehensive loss	\$ 29,115	\$	36,151
Net loss per share, basic and diluted	\$ 67.45	\$	58.09
Weighted average number of shares used in computing net loss per share, basic and diluted	431,679		622,289
Pro forma net loss per share, basic and diluted (unaudited)		\$	2.50
Weighted average number of shares used in computing pro forma net loss per share, basic and diluted (unaudited)		14	4,461,086

RAPT THERAPEUTICS, INC. CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT (In thousands, except share amounts)

	Convertible <u>Stoc</u> Shares		<u>Commor</u> Shares	ı Stock Amount	Additional Paid-In Capital	Related Party Promissory Notes for the Purchase of Common Stock	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Deficit
Balance at December 31, 2016	62,509,105		868,056	\$ 1	\$ 20,043	\$ (596)	\$ (53,691)	\$ —	\$ (34,243)
Issuance of Series C convertible preferred stock, net of issuance cost	13,054,679	29,856	_	_	_	_	_	_	_
Issuance of common stock upon exercise of stock options, net of repurchase	_	_	12,135	_	246	_	_	_	246
Interest on promissory notes from related parties for purchase of			12,133		240				
common stock	_	_	_	_	_	(9)	_	_	(9)
Stock-based compensation	_	_	_	_	716	_	— (20 115)	_	716
Net loss							(29,115)		(29,115)
Balance at December 31, 2017 Issuance of Series C convertible preferred stock, net of issuance	75,563,784	108,643	880,191	1	21,005	(605)	(82,806)	_	(62,405)
cost	13,054,684	29,914		_	_	_	_	_	_
Issuance of Series C-2 convertible preferred stock, net of issuance cost	9,873,412	22,554	_	_	_	_	_	_	_
Issuance of common stock upon exercise of stock options, net of repurchase	_		6,555	_	266	_	_	_	266
Repurchase of common stock from related party	_	_	(8,333)	_	_	17	_	_	17
Interest on promissory notes from related parties for purchase of						(10)			(10)
common stock Stock-based compensation					1,170	(10)			(10)
Foreign currency	_	_	_	_	1,1/0	_	_	_	1,170
translation adjustment Net loss	_	_		_	_	_	(36,147)	(4) —	(4) (36,147)
Balance at December 31, 2018	98,491,880	\$161 111	878,413	\$ 1	\$ 22,441	\$ (598)	\$ (118,953)	\$ (4)	\$ (97,113)
Datance at December 31, 2010	JU,4J1,000	Ψ 101,111	0/0,413	<u>π</u>	Ψ <u></u> <u> </u>	ψ (330)	ψ (110,333)	ψ (4)	ψ (3/,113)

RAPT THERAPEUTICS, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

	Year Ended I	<u>December 31,</u> 2018
Operating activities	2017	2010
Net loss	\$ (29,115)	\$ (36,147)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	1,384	1,237
Stock-based compensation expense	716	1,170
Loss on disposal of capital equipment	15	17
Other noncash income (loss), net	(9)	(14)
Changes in operating assets and liabilities:		
Prepaid expenses and other long-term assets	(34)	(691)
Accounts payable and accrued liabilities	(80)	1,475
Net cash used in operating activities	(27,123)	(32,953)
Investing activities		
Purchase of property and equipment	(1,124)	(3,500)
Net cash used in investing activities	(1,124)	(3,500)
Financing activities		
Proceeds from the sale of convertible preferred stock, net of issuance costs	29,856	52,468
Proceeds from issuance of common stock, net of repurchases	246	266
Net cash provided by financing activities	30,102	52,734
Net increase in cash and cash equivalents	1,855	16,281
Cash and cash equivalents at beginning of year	45,662	47,517
Cash and cash equivalents at end of year	\$ 47,517	\$ 63,798
Supplemental Disclosures of Non-Cash Investing and Financing Information	· <u></u>	
Property and equipment purchases included in accounts payable	<u>\$ —</u>	\$ 753

RAPT THERAPEUTICS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Liquidity Risks

Description of the Business

RAPT Therapeutics, Inc. ("RAPT" or the "Company"), is a clinical-stage, immunology-based biopharmaceutical company focused on discovering, developing and commercializing oral small molecule therapies for patients with significant unmet needs in oncology and inflammatory diseases. Utilizing its proprietary drug discovery and development engine, the Company develops highly selective small molecules that are designed to modulate the critical immune responses underlying these diseases. In May 2019, the Company changed its name from FLX Bio, Inc. ("FLX") to RAPT Therapeutics, Inc.

The Company is located in South San Francisco, California.

Liquidity and Management Plans

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. Since inception, the Company has incurred net losses and negative cash flows from operations. During the year ended December 31, 2018, the Company incurred a net loss of \$36.1 million and used \$33.0 million of cash in operations. At December 31, 2018, the Company had cash and cash equivalents of \$63.8 million and an accumulated deficit of \$119.0 million. Management expects losses to continue for the next several years and does not expect positive cash flows in the foreseeable future.

The Company has historically financed its operations through the sale of convertible preferred stock. The Company has evaluated and concluded there are no conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a period of at least one year following the date that these consolidated financial statements were issued. Management expects operating losses to continue for the foreseeable future. As a result, the Company will need to raise additional capital. If sufficient funds on acceptable terms are not available when needed, the Company could be required to significantly reduce its operating expenses and delay, reduce the scope of or eliminate one or more of its development programs. Failure to manage discretionary spending or raise additional financing, as needed, may adversely impact the Company's ability to achieve its intended business objectives.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") and include the consolidated accounts of the Company and its wholly-owned subsidiary, RAPT Therapeutics Australia Pty Ltd. which was established in 2018. All intercompany balances and transactions have been eliminated in consolidation.

Stock Split

On July 19, 2019, the Company filed an amendment to the Company's amended and restated certificate of incorporation to effect a reverse split of shares of the Company's common stock on a one-for-six basis (the Reverse Stock Split). In connection with the Reverse Stock Split, the conversion ratio for the Company's outstanding convertible preferred stock was proportionately adjusted such that the common stock issuable upon conversion of such preferred stock was decreased in proportion to the Reverse Stock Split. The par value of the common stock was not adjusted as a result of the Reverse Stock Split. All references to common stock, options to

RAPT THERAPEUTICS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

purchase common stock, early exercised options, share data, per share data, convertible preferred stock (to the extent presented on an as-converted to common stock basis) and related information contained in these consolidated financial statements have been retrospectively adjusted to reflect the effect of the Reverse Stock Split for all periods presented.

Unaudited Pro Forma Financial Information

The unaudited pro forma consolidated stockholders' equity as of December 31, 2018, assumes the conversion of all outstanding shares of convertible preferred stock into 98,491,880 shares of common stock immediately prior to the completion of the Company's planned initial public offering ("IPO"). The shares of common stock issuable and the proceeds expected to be received in the IPO are excluded from such pro forma financial information. Pro forma basic and diluted net loss per share has been computed to give effect to the conversion of all outstanding convertible preferred stock into shares of common stock. The unaudited pro forma net loss per share for the year ended December 31, 2018, was computed using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding shares of convertible preferred stock into shares of common stock, as if such conversion had occurred at the beginning of the period, or their issuance dates, if later.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. The Company bases its estimates on historical experience and market-specific or other relevant assumptions that it believes are reasonable under the circumstances. The amounts of assets and liabilities reported in the Company's balance sheets and the amount of expenses and income reported for each of the periods presented are affected by estimates and assumptions, which are used for, but are not limited to, determining the fair value of assets and liabilities, common stock valuation and stock-based compensation. Actual results could differ from such estimates or assumptions.

Segments

The Company operates as a single operating segment. The Company's chief operating decision maker, its President and Chief Executive Officer, manages the Company's operations on a consolidated basis for the purposes of allocating resources, making operating decisions and evaluating financial performance.

Fair Value of Financial Instruments

The carrying amount of the Company's financial instruments, including certain prepaid and accrued expenses, approximates fair value due to their short-term maturities.

Cash and Cash Equivalents

Cash equivalents are financial instruments that potentially subject the Company to concentrations of credit risk. The Company considers all highly liquid investments with original maturities of 90 days or less from the date of purchase to be cash equivalents. The Company invests its cash and cash equivalents in money market funds. The Company limits its credit risk associated with cash and cash equivalents by placing its cash with banks and institutions it believes are highly credit worthy and in highly-rated investments.

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Property and Equipment

Property and equipment consist of computer equipment, laboratory equipment, leasehold improvements and furniture and fixtures, and is recorded at cost, less accumulated depreciation and amortization. Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the respective assets, generally three to five years. Leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the improvements.

Depreciation and amortization begin at the time the asset is placed in service. Maintenance and repairs are charged to expense as incurred. Upon sale or retirement of assets, the cost and related accumulated depreciation and amortization are removed from the balance sheet and the resulting gain or loss is reflected in the results of operations.

Impairment of Long-Lived Assets

The Company evaluates its long-lived assets for impairment annually or more frequently whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. Recoverability of these assets is measured by comparing the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate over its remaining life. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. As of December 31, 2017 and 2018, the Company has not recorded any impairment losses on long-lived assets.

Leases

The Company leases office space and laboratory facilities under non-cancelable operating lease agreements and recognizes related rent expense on a straight-line basis over the term of the lease. Funding of leasehold improvements by the Company's landlord is accounted for as a tenant improvement allowance and recorded as current and non-current deferred rent liabilities and amortized on a straight-line basis as a reduction of rent expense over the term of the lease.

Convertible Preferred Stock

The Company records all shares of convertible preferred stock at their respective fair values on the dates of issuance, less issuance costs. In the event of a change of control of the Company, proceeds received from the sale of such shares will be distributed in accordance with the liquidation preferences set forth in the Company's Amended and Restated Certificate of Incorporation unless the holders of the convertible preferred stock have converted their shares of convertible preferred stock into shares of common stock. Convertible preferred stock is classified outside of stockholders' deficit on the balance sheet as events triggering redemption are not solely within the Company's control.

The Company has not adjusted the carrying values of its convertible preferred stock to the liquidation preferences of such shares because of the uncertainty of whether or when such an event would occur. As of December 31, 2018, it was not probable that such a redemption would occur.

Research and Development Costs

Research and development costs are charged to expense as incurred. Research and development costs consist primarily of salaries and benefits of research and development personnel, costs related to research

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activities, preclinical studies, clinical trials, drug manufacturing and allocated overhead and facility-related expenses. The Company accounts for non-refundable advance payments for goods or services that will be used in future research and development activities as expenses when the goods have been received or when the service has been performed rather than when the payment is made.

Clinical trial costs are a component of research and development expenses. The Company expenses costs for its clinical trial activities performed by third parties, including clinical research organizations ("CROs") and other service providers, as they are incurred, based upon estimates of the work completed over the life of the individual study in accordance with associated agreements. The Company uses information it receives from internal personnel and outside service providers to estimate the clinical trial costs incurred.

Stock-Based Compensation

The Company measures employee and director stock-based compensation expense for all stock-based awards based on their grant date fair value using the Black-Scholes option-pricing model. For stock-based awards with service conditions only, stock-based compensation expense is recognized over the requisite service period using the straight-line method. For awards with performance conditions, the Company evaluates the probability of achieving performance conditions at each reporting date. The Company begins to recognize stock-based compensation expense using an accelerated attribution method when it is deemed probable that the performance condition will be met. Forfeitures are recognized as they occur.

Stock-based compensation expense for nonemployee stock-based awards is measured at fair value using the Black-Scholes option-pricing model. The Company recognizes stock-based compensation expense for the estimated fair value of the vested portion of nonemployee awards in its consolidated statements of operations and comprehensive loss. Stock-based compensation expense related to stock option grants to nonemployees is subject to re-measurement over the service period, which approximates the vesting period.

Stock-based compensation expense related to restricted stock awards is determined using the estimated fair value of the Company's common stock on the date of grant. The estimated fair value is amortized as compensation expense over the service period of the award.

Foreign Currency Transactions

The functional currency of RAPT Therapeutics Australia Pty Ltd., our wholly-owned subsidiary, is the Australian dollar. Accordingly, all monetary assets and liabilities of the subsidiary are translated into U.S. dollars at the current period-end exchange rates and non-monetary assets are translated using historical exchange rates. Income and expense elements are remeasured to U.S. dollars using the average exchange rates in effect during the period. Remeasurement gains and losses are recorded as other income (expense).

The Company is subject to foreign currency risk with respect to its clinical contracts denominated in currencies other than the U.S. dollar. Payments on contracts denominated in foreign currencies are made at the spot rate on the day of payment. Changes in the exchange rate between billing dates and payment dates are recorded to other (income), net on the consolidated statements of operations.

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit

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carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period such tax rate changes are enacted.

The Company recognizes the effect of income tax positions only if those positions are more likely than not to be sustained. Recognized income tax positions are measured at the largest amount that is greater than 50% likely to be realized. Changes in recognition or measurement are reflected in the period in which the change in judgment occurs. Valuation allowances are established when necessary to reduce deferred tax assets to amounts more likely than not to be realized. Interest and penalties related to unrecognized tax benefits are recognized as a component of income tax expense.

Comprehensive Loss

Comprehensive loss includes net loss and certain changes in stockholders' deficit that are excluded from net loss, primarily unrealized losses from foreign currency translation adjustments.

Net Loss Per Share

Basic net loss per share is computed by dividing the net loss by the weighted average number of common shares outstanding during the period, without consideration of potential dilutive securities. Diluted net loss per share is computed by dividing the net loss by the sum of the weighted average number of common shares outstanding during the period plus the potential dilutive effects of potential dilutive shares outstanding during the period. Potential dilutive securities include stock options, warrants and convertible preferred stock. The dilutive effect of stock options and warrants is computed using the treasury stock method and the dilutive effect of convertible preferred stock is calculated using the "if-converted method". For all periods presented, diluted net loss per share is the same as basic net loss per share since the effect of including potential common shares is anti-dilutive.

Recent Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board ("FASB") or other standard setting bodies and adopted by us as of the specified effective date. Under the Jumpstart Our Business Startups Act of 2012, as amended (the "JOBS Act"), we meet the definition of an emerging growth company, and have elected the extended transition period for complying with new or revised accounting standards pursuant to Section 107(b) of the JOBS Act.

Recently Adopted Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which supersedes the revenue recognition requirements in ASC 605, Revenue Recognition. This standard is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard 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. The standard is effective for annual periods beginning after December 15, 2018 using one of two retrospective application methods. The Company has elected to adopt this standard as of January 1, 2018. The adoption of ASU No. 2014-09 did not have any impact on the Company's consolidated financial statements and related disclosures.

RAPT THERAPEUTICS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

In May 2017, the FASB issued ASU No. 2017-09, Compensation—Stock Compensation (Topic 718), Scope of Modification Accounting. This pronouncement provides guidance about which changes to the terms or conditions of a share-based payment award may require an entity to apply modification accounting under Topic 718. This guidance is effective for the Company for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period, with early adoption permitted. The Company adopted this standard on January 1, 2018. The adoption of ASU No. 2017-09 did not have a significant impact on the Company's consolidated financial statements and related disclosures.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, Leases. ASU 2016-02 requires lessees to put most leases on their balance sheet while recognizing expense in a manner similar to existing accounting. ASU 2016-02 states that a lessee would recognize a lease liability for the obligation to make lease payments and a right-to-use asset for the right to use the underlying asset for the lease term. The new accounting guidance is effective for the Company for fiscal periods beginning after December 15, 2019 and early adoption is permitted. The Company is currently assessing the timing of adoption and the impact that the adoption will have on its consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230), which provides greater clarity to preparers on the treatment of certain items within an entity's statement of cash flows. The new guidance is intended to reduce diversity in practice in how certain transactions are classified in the statement of cash flows. The guidance is effective for the Company on January 1, 2019, and the Company is currently evaluating the impact that the adoption of ASU 2016-15 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 Non-Employee Share-Based Payment Accounting as part of the FASB simplification initiative. The new standard expands the scope of Topic 718, allowing the Company to apply the requirements of Topic 718 to certain non-employee awards to acquire goods and services from non-employees. This ASU will be effective for the Company for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020, with early adoption permitted. The Company is currently assessing the timing of adoption and the impact that the adoption of ASU 2018-07 will have on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU No. 2018-13, Fair Value Measurements (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement as part of the FASB's disclosure framework project. This ASU modifies the disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement by removing the requirement to disclose amounts of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, the policy for timing of transfers between levels, and the valuation process for Level 3 fair value measurements. This ASU also modifies existing disclosure requirements by clarifying that the measurement uncertainty disclosure is to communicate information about the uncertainty in measurement as of the reporting date, and it adds required disclosures for the changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period, and the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. This ASU will be effective for the Company for fiscal years and interim periods within those fiscal years, beginning after December 15, 2019. The Company is currently assessing the impact of this ASU on its consolidated financial statements.

3. Fair Value Measurements

Fair value accounting is applied for all financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). Financial instruments include cash and cash equivalents, accounts payable and accrued liabilities that approximate fair value due to their relatively short maturities.

Assets and liabilities recorded at fair value on a recurring basis in the balance sheet 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. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities 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 related assets or liabilities; and

Level 3—Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

Financial assets subject to fair value measurements on a recurring basis comprise money market funds that are measured using Level 1 inputs. The money market funds subject to fair value measurements at December 31, 2017 and 2018 were \$47.5 million and \$63.7 million, respectively, and are included in cash and cash equivalents.

4. Property and Equipment

Property and equipment consists of the following (in thousands):

	Dece	<u>mber 31,</u>
	<u>2017</u>	2018
Laboratory equipment	\$ 4,603	\$ 5,466
Leasehold improvements	598	2,989
Computer equipment	244	308
Furniture and fixtures	237	365
Total property and equipment	5,682	9,128
Less accumulated depreciation and amortization	(3,769)	(4,969)
Property and equipment, net	\$ 1,913	\$ 4,159

Depreciation and amortization expenses were \$1.4 million and \$1.2 million for the years ended December 31, 2017 and 2018, respectively.

5. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	Dec	ember 31,
	<u>2017</u>	2018
Accrued clinical expenses	\$ 39	\$ 519
Accrued compensation	1,019	1,433
Accrued professional and consulting services	317	182
Accrued property and equipment	_	202
Accrued lab supplies	70	80
Other	47	72
Total accrued expenses	\$1,492	\$2,488
-		

6. Commitments

The Company enters into contracts in the normal course of business with CROs for preclinical studies and clinical trials. These agreements provide for notice of termination by either party and are, therefore, cancelable contracts.

In May 2015, the Company entered into an operating lease for 30,376 square feet of laboratory and office facilities in South San Francisco, California, which expires in May 2022 and provides for tenant improvement allowances of \$0.8 million. In April 2018, the Company amended the lease agreement to include an additional 6,378 square feet of laboratory and office space increasing the total leased premises to 36,754 square feet. The lease amendment extended the lease term to November 2026, and contains scheduled rent increases over the lease term and an option for the Company to extend the lease for an additional five-year term. The lease amendment contains a tenant improvement allowance of \$1.4 million that the Company used in 2018 toward \$2.4 million in total leasehold improvements, which is amortized over the remaining lease term.

In February 2019, the Company entered into an agreement to sublease its facility lease of 6,378 square feet of laboratory and office space with a related party. See Note 14 for further discussion.

As of December 31, 2018, future minimum non-cancelable lease payments, net of sublease rental income, are as follows (in thousands):

Year ending December 31:	
2019	\$ 1,432
2020	1,639
2021	1,969
2022	2,038
Thereafter	8,687
Total minimum lease payments	\$15,765

The terms of the lease agreement provide for rental payments on a monthly basis and on a graduated scale. The Company recognizes rent expense on a straight-line basis over the lease period and has accrued for rent expense incurred but not paid. Rent expense includes certain monthly charges that do not represent non-cancelable obligations, as defined. These costs are determined based on actual charges incurred. In addition,

tenant improvement allowances recorded are amortized as a reduction to rent expense on a straight-line basis over the lease term. Rent expense was \$1.6 million and \$1.8 million in the years ended December 31, 2017 and 2018, respectively.

From time to time, the Company may be subject to various legal proceedings and claims arising in the ordinary course of business. The Company assesses contingencies to determine the degree of probability and range of possible loss for potential accrual in its financial statements. An estimated loss contingency is accrued in the financial statements if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. The Company is not subject to any current pending legal matters or claims and no contingency loss had been accrued.

7. Clinical Trial Collaboration and Supply Agreement

In November 2018, the Company entered into a clinical trial collaboration and supply agreement with Merck (known as MSD outside the United States and Canada), through an affiliate, under which the Company will conduct a clinical trial evaluating FLX475 in combination with KEYTRUDA® (pembrolizumab), Merck's anti-PD-1 therapy, in patients with advanced cancers. The Company is the sponsor of the clinical trial, and Merck will supply KEYTRUDA® for use in the clinical trial.

8. Related-Party Promissory Notes

In August 2015 and June 2016, the Company entered into limited recourse promissory notes with the Company's chief executive officer and chief operating officer for the purchase of restricted common stock. The principal amount of the loans was \$0.3 million and \$0.3 million, respectively. The loans are secured by the shares of common stock of the Company held by the individuals. The loans accrue interest at a rate of 1.82% and 1.41% per annum, respectively, and are due upon the earlier of voluntary termination of services to the Company, filing by the Company of its first registration statement with the Securities and Exchange Commission under the Securities Act of 1933 or sale of substantially all of the Company's assets. As of December 31, 2017 and 2018, the total outstanding balance under these notes, including accrued interest, was approximately \$0.6 million and \$0.6 million, respectively. The notes are recorded within stockholders' deficit.

9. Convertible Preferred Stock and Stockholders' Deficit

Convertible preferred stock

In June 2018, the Company completed a subsequent closing of Series C convertible preferred stock financing at \$2.2925 per share for \$29.9 million in gross proceeds. Additionally, in December 2018, the Company completed a \$22.6 million Series C-2 convertible preferred stock financing at \$2.2925 per share, and between January 2019 and March 2019, the Company completed subsequent closings of Series C-2 convertible preferred stock financing at \$2.2925 per share for \$7.0 million.

As of December 31, 2017, convertible preferred stock consisted of the following (in thousands, except share amounts):

	Shares Authorized	Shares Issued and Outstanding	Net Carrying <u>Value</u>	Aggregate Liquidation Preference
Series A	37,509,105	37,509,105	\$ 28,861	\$ 37,509
Series B	25,000,000	25,000,000	49,926	50,000
Series C	26,240,224	13,054,679	29,856	29,928
Total convertible preferred stock	88,749,329	75,563,784	\$ 108,643	\$ 117,437

As of December 31, 2018, convertible preferred stock consisted of the following (in thousands, except share amounts):

	Shares <u>Authorized</u>	Shares Issued and <u>Outstanding</u>	Net Carrying <u>Value</u>	Aggregate Liquidation <u>Preference</u>
Series A	37,509,105	37,509,105	\$ 28,861	\$ 37,509
Series B	25,000,000	25,000,000	49,926	\$ 50,000
Series C	26,109,363	26,109,363	59,770	\$ 59,856
Series C-2	15,400,000	9,873,412	22,554	\$ 22,635
Total convertible preferred stock	104,018,468	98,491,880	\$ 161,111	\$ 170,000

The rights, privileges, and preferences of the convertible preferred stock are as follows:

Conversion

Each share of Series A, Series B, Series C and Series C-2 convertible preferred stock are initially convertible, at the option of the holder at any time, into shares of common stock as determined by dividing the applicable original issue price for such series by the applicable conversion price for such series, subject to adjustment in the event of any stock splits, stock dividends, combinations, subdivisions or similar recapitalization affecting such shares, and subject also to adjustment for certain dilutive issuances. Conversion of all outstanding convertible stock is automatic upon (i) the closing of a firm commitment underwritten public offering resulting in at least \$30,000,000 in gross proceeds to the Company, prior to underwriting commissions and expenses, provided that the public offering price is at least \$13.7550 per share, as adjusted for any stock dividends, combinations, splits, recapitalizations and the like or (ii) the election of the holders of 55% or more of the then outstanding shares of preferred stock.

Dividends

The holders of Series A, Series B, Series C and Series C-2 convertible preferred stock shall be entitled to receive dividends, when, as and if declared by the Board of Directors, at the rate per annum of \$0.08, \$0.16, \$0.18, \$0.18 per share, respectively, subject to adjustment in the event of any stock splits, stock dividends, combinations, subdivisions or similar recapitalization affecting such shares.

Accrued dividends are payable when, as and if declared by the Board of Directors, and are not cumulative. After payment of the above dividend, any additional dividends shall be distributed among all holders of common and preferred stock in proportion to the number of shares of common stock into which the representative shares are convertible.

Voting

Each holder of shares of Series A, Series B, Series C and Series C-2 convertible preferred stock is entitled to one vote for each share of common stock into which such shares of preferred stock are convertible, has voting rights and powers equal to the voting rights and powers of the common stock and shall vote together with the common stock on all matters as to which holders of common stock have the right to vote, in each case, except as provided by law or by other provisions of the Company's Restated Certificate of Incorporation.

Election of board of directors

As long as at least 6,000,000 shares of preferred stock are outstanding, as adjusted for any stock dividends, combinations, splits, recapitalizations and the like, the holders of shares of Series A, Series B, Series

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C and Series C-2 convertible preferred stock, voting as a separate class, are entitled to elect two members of the Board of Directors. The holders of shares of common stock, voting as a separate class, are entitled to elect two members of the Board of Directors. The holders of the shares of preferred stock and common stock, voting together as a single class, and on an as-converted basis, are entitled to elect all remaining members of the Board of Directors.

Protective provisions

As long as at least 6,000,000 shares of preferred stock are outstanding, as adjusted for any stock dividends, combinations, splits, recapitalizations and the like, the Company shall first obtain the approval by vote or written consent of the holders of at least 65% of the then outstanding shares of preferred stock, voting together as a single class and not as a separate series, and on an as-converted basis with respect to: (i) consummation of liquidation event or effect any other merger or consolidation, (ii) amend, alter or repeal any provision of the Company's certificate of incorporation of bylaws, (iii) increase or decrease the total number of authorized shares of common stock or preferred stock or designated shares of any series of preferred stock, (iv) authorize, issue or obligate the Company to issue any equity security having preference over any series of preferred stock, (v) redeem, purchase or otherwise acquire any share or shares of preferred stock or common stock, (vi) change the authorized number of directors of the Company, (vii) increase the number of shares of common stock reserved under any employee equity incentive plan, (viii) permit any subsidiary to sell or issue equity securities, (ix) pay or declare any dividend on any shares of capital stock and (x) authorize, issue or obligate the Company to issue any debt security if the aggregate indebtedness exceeds \$5,000,000.

Liquidation preferences

In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company or other "Liquidation Event" (as defined in the Company's Restated Certificate of Incorporation), the holders of shares of Series A, Series B, Series C and Series C-2 convertible preferred stock shall be entitled to be paid an amount equal to the original issue price per share, subject to adjustment in the event of any stock splits, stock dividends, combinations, subdivisions or similar recapitalization affecting such shares together with any dividends declared but unpaid, prior to the payment of any distributions to the holders of common stock. If, upon the occurrence of such event, the assets and funds distributed among the holders of the Series A, Series B, Series C and Series C-2 convertible preferred stock are insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and funds of the Company legally available for distribution are to be distributed ratably among the holders of the Series A, Series B, Series C and Series C-2 convertible preferred stock.

All holders of Series A, Series B, Series C and Series C-2 convertible preferred stock shall be deemed to have converted if, as a result of an actual conversion, such holder would receive, in the aggregate, a greater amount than the amount that would be distributed to such holder if such holder did not convert such shares of Series A, Series B, Series C and Series C-2 convertible preferred stock into common stock.

Classification

The Company has classified the convertible preferred stock outside of permanent equity on the balance sheet as these shares can be redeemed upon the occurrence of certain change in control events that are outside of the Company's control, including liquidation, sale or transfer of the Company. The Company has not adjusted the carrying values of the convertible preferred stock to the liquidation preferences of such shares because it is uncertain whether or when an event would occur that would obligate the Company to pay the liquidation preferences to holders of shares of redeemable convertible preferred stock, and at the balance sheet dates these

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circumstances were not probable. Subsequent adjustments to the carrying values of the liquidation preferences will be made only when it becomes probable that such a liquidation event will occur.

10. Common Stock

The holders of the Company's common stock have one vote for each share of common stock held by them. Holders of shares of the Company's common stock are entitled to dividends when, as, and if declared by the Board of Directors, subject to the prior rights of the holders of convertible preferred stock. As of December 31, 2017 and 2018, no dividends had been declared.

As of December 31, 2018, the Company had reserved the following shares of common stock, on an as-converted basis, for future issuance as follows:

Series A convertible preferred stock outstanding	6,251,502
Series B convertible preferred stock outstanding	4,166,663
Series C convertible preferred stock outstanding	4,351,554
Series C-2 convertible preferred stock outstanding	2,566,666
Options issued and outstanding	768,239
Options available for future grants	693,879
Total	18,798,503

11. Stock Option Plan

In 2015, the Company adopted the FLX Bio, Inc. 2015 Stock Plan (the 2015 Plan) for eligible employees, officers, directors, advisors, and consultants, which provides for the grant of incentive and non-statutory stock options and restricted shares of common stock. Terms of the stock option agreements, including vesting requirements, are determined by the Board of Directors, subject to the provisions of the 2015 Plan. Options granted generally vest over four years and expire no later than ten years from the date of grant. The estimated fair value of the underlying common stock is determined by the Board of Directors. The exercise price of the incentive stock options must be equal to or greater than the estimated fair value of the underlying common stock on the date of grant.

The following summarizes option activity under the 2015 Plan:

	Shares <u>Available</u>	Number of Shares Outstanding	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term (Years)	Ir	gregate trinsic Value 10usands)
Balances at December 31, 2016	539,900	142,037	\$ 1.56	9.47	\$	426
Stock options authorized	540,554	_				
Stock options granted	(306,804)	306,804	1.99			
Stock options exercised	_	(50,034)	1.91			
Unvested common shares repurchased	37,893	_	1.06			
Stock options forfeited	50,147	(50,147)	1.84			
Balances at December 31, 2017	861,690	348,660	\$ 1.85	9.02	\$	526
Stock options authorized	250,000	_				
Stock options granted	(497,417)	497,417	6.18			
Stock options exercised	_	(17,390)	1.93			
Unvested common shares repurchased	19,158	_	1.39			
Stock options forfeited	60,448	(60,448)	2.74			
Balances at December 31, 2018	693,879	768,239	\$ 4.62	8.84	\$	1,291
Vested and expected to vest at December 31, 2018		768,223		8.84	\$	1,291
Exercisable at December 31, 2018		137,159		7.99	\$	580

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, as of December 31, 2017 and 2018.

During the year ended December 31, 2017, the Company granted 0.3 million stock options to purchase shares of common stock with a weighted-average grant date fair value of \$3.60 per share and a weighted-average exercise price of \$1.99 per share. The weighted average grant date fair value of the common stock was \$4.38 per share. The grant date fair value of those awards was \$1.2 million. During the year ended December 31, 2018, the Company granted 0.5 million stock options to purchase shares of common stock with a weighted-average grant date fair value of \$4.32 per share and a weighted-average exercise price of \$6.18 per share. The grant date fair value of those awards was \$2.1 million. The intrinsic value of options exercised for the years ended December 31, 2017 and 2018 was \$0.2 million and \$0.1 million, respectively. The fair value of the 0.3 million and 0.3 million stock options vested during 2017 and 2018 was \$0.6 million and \$0.9 million, respectively.

The Company had 33,333 shares and 25,000 shares of performance-based stock options outstanding as of December 31, 2017 and 2018, respectively. The grant date fair value of the award was \$0.2 million. As of December 31, 2017 and 2018, the Company has not recognized any of the related stock-based compensation expense, as vesting of the awards was not determined to be probable.

Employee stock option valuation

The assumptions used to value employee and director stock option awards granted under the 2015 Plan during the years ended December 31, 2017 and 2018, using the Black-Scholes option pricing model, were as follows:

	Year Ended December 31,		
	<u>2017</u>	<u>2018</u>	
Fair value of common stock	\$3.84 - \$6.18	\$6.18 - \$6.30	
Expected term (in years)	5.96 -6.07	5.67 - 6.08	
Volatility	81.50% - 83.06%	80.69% - 81.48%	
Risk-free interest rate	1.75% - 2.22%	2.62% -2.88%	
Dividend yield	-	_	

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 independent third parties, sales of 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.

In determining the fair value of the options granted, the Company uses the Black-Scholes option-pricing model and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

Expected term

The expected term represents the period that the Company's options granted are expected to be outstanding and is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term). The Company has very limited historical information to develop reasonable expectations about future exercise patterns and post-vesting employment termination behavior for its stock option grants.

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 biopharmaceutical companies over a period, where available, equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, life cycle stage 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 options.

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.

Stock options granted to nonemployees

Stock-based compensation related to stock options granted to non-employees is recognized as the services are rendered. The assumptions used to value non-employee stock option awards granted under the 2015 Plan during the years ended December 31, 2017 and 2018, using the Black-Scholes option pricing model, were as follows:

	Year Ended D	Year Ended December 31,		
	2017	2018		
Expected term (in years)	7.34 - 10.00	6.34 - 10.00		
Volatility	78.92% - 86.03%	78.29% - 85.47%		
Risk-free interest rate	1.32% - 2.57%	1.32% - 3.19%		
Dividend vield	_	_		

During the years ended December 31, 2017 and 2018, the Company granted 33,332 and 4,166 options to nonemployee consultants and recognized related expense of \$0.1 million and \$0.1 million, respectively.

Early exercise of stock options

The terms of the 2015 Plan permit option holders to exercise stock options before they are vested, subject to certain limitations. Such unvested shares are subject to repurchase by the Company at the original exercise price in the event the option holder's service to the Company is terminated either voluntarily or involuntarily. As a result of early exercises under the 2015 Plan, approximately 0.4 million and 0.2 million shares were subject to repurchase as of December 31, 2017 and 2018, respectively. The Company treats cash received from the exercise of unvested options as a refundable deposit and classifies such amounts as a liability in its balance sheet. As of December 31, 2017 and 2018, the Company included cash received for the early exercise of unvested options of \$0.5 million and \$0.2 million, respectively, in other current liabilities. Amounts included in liabilities are transferred into common stock and additional paid-in capital as the shares vest, which is generally over a period of 48 months and may include a one-year cliff.

Stock-based compensation expense

Total stock-based compensation recognized for both employees and non-employees was as follows (in thousands):

	Year I	Year Ended December 31,	
	2017	2018	
Research and development	394	542	
General and administrative	322	628	
Total stock-based compensation expense	\$ 716	\$ 1,170	

As of December 31, 2018, unrecognized stock-based compensation cost related to outstanding unvested stock options that are expected to vest was \$1.3 million. This unrecognized stock-based compensation cost is expected to be recognized over 1.72 years.

12. Income Taxes

The following table presents domestic and foreign components of income (loss) before income taxes for the periods presented (in thousands):

	Decemb	December 31,	
	2017	2018	
United States	\$(29,114)	\$(36,033)	
Foreign		(113)	
	\$(29,114)	\$(36,146)	

A reconciliation of the statutory U.S. federal rate and effective rate is as follows:

	December 31(1)	
	<u>2017</u>	2018
Federal tax	34.0%	21.0%
State, net of federal benefit		
Stock based compensation	(1.0)	(0.6)
R&D credit	2.0	3.68
Change in valuation allowance	(8.0)	(24.13)
Other		0.05
Re-measurement of deferred tax assets	(27.0)	
Income tax expense	0.0%	0.0%

Note:

(1) For the year ended December 31, 2017, the statutory tax rate was 34%. For the year ended December 31, 2018, as a result of Tax Reform, the statutory tax rate was decreased to 21%.

The Company has not recorded income tax expense or benefit through December 31, 2018 because of the Company's history of operating losses. The Company has incurred net operating losses for all periods since inception. The Company has not reflected any benefit of such net operating loss carryforwards in the accompanying financial statements. The Company has established a full valuation allowance against its deferred tax assets due to the uncertainty surrounding the realization of such assets.

The Tax Cuts and Job Act (the "Act") was enacted on December 22, 2017. The Act reduces the top U.S. federal corporate tax rate from 34% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred, changes the rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017, allows for immediate expensing of fixed asset additions beginning after September 27, 2017 and creates new taxes on certain foreign-sourced earnings. In 2017, the Company was not subject to a one-time transition tax as no foreign accumulated earnings and profits existed.

The Tax Act created a new requirement that global intangible low-taxed income ("GILTI") earned by the Company's foreign wholly-owned subsidiary must be included in gross U.S. taxable income. While the Tax Act provides for a modified territorial tax system, beginning in 2018, GILTI provisions will be applied providing an incremental tax on low taxed foreign income. The GILTI provisions require the Company to include in its U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets. During 2018, the Company made an accounting policy election to treat taxes related to GILTI as a current period expense when incurred.

We applied the guidance in Staff Accounting Bulletin No. 118 to reasonably estimate the effects of the 2017 Act and recorded provisional amounts in our financial statements as of December 31, 2017. In 2017, as a result of the signing of the Act, the Company recorded a \$7.9 million reduction in our deferred tax assets due to the decrease in the Federal rate along with a corresponding reduction of our valuation allowance. In 2018, we completed our determination of the accounting implications of the 2017 Act and recorded no adjustments to the provisional amounts.

The components of the Company's deferred tax assets are as follows (in thousands):

	December 31		
	2017	2018	
Net operating loss carryforwards	\$ 13,635	\$ 20,810	
Federal and state tax credits	2,035	3,378	
Depreciation and amortization	60	105	
Accrued liabilities and reserves	313	448	
Stock-based compensation	25	50	
Gross deferred tax assets	\$ 16,068	\$ 24,791	
Valuation allowance	(16,068)	(24,791)	
Net deferred taxes	<u> </u>	<u> </u>	

Realization of deferred tax assets is dependent upon future taxable income, if any. The Company has established a valuation allowance to offset deferred tax assets as of December 31, 2017 and 2018, due to the uncertainty of realizing future tax benefits from its net operating loss carryforwards and other deferred tax assets. The valuation allowance increased by approximately \$2.4 million and \$8.7 million during the years ended December 31, 2017 and 2018, respectively. The increase in the valuation allowance is mainly related to the increase in net operating loss carryforwards incurred during the respective taxable years

As of December 31, 2017, and 2018, the Company had federal net operating loss carryforwards of approximately \$60.9 million and \$95.0 million, respectively. The federal NOL carryforwards generated during and after fiscal 2018 totaling \$34.1 million are carried forward indefinitely, while all others along with the federal tax credit carryforwards, expire in years beginning in 2035. As of December 31, 2017 and 2018, the Company had approximately \$12.1 million and \$12.1 million of state net operating loss carryforwards, respectively, which begin to expire in 2035 and are available to offset future taxable income. As of December 31, 2017, and 2018, the Company had research and development tax credit carryforwards of approximately \$1.7 million and \$2.7 million, and approximately \$1.4 million and \$2.3 million, available to reduce future federal and state income taxes, respectively. Moreover, as of December 31, 2017 and 2018, the Company recorded federal and state reserves of \$0.4 million and \$0.7 million and approximately \$0.3 and \$0.6 million, respectively, as uncertain tax positions as of December 31, 2018. If not utilized, the federal credit carryforwards will begin expiring in 2035. The state credits carry forward indefinitely.

Federal and state laws impose substantial restrictions on the utilization of net operating loss and tax credit carryforwards in the event of an ownership change for tax purposes, as defined in Section 382 of the Internal Revenue Code. As a result of such ownership changes, the Company's ability to realize the potential future benefit of tax losses and tax credits that existed at the time of the ownership change may be significantly reduced. The Company's deferred tax asset and related valuation allowance would be reduced as a result. The Company has not yet performed a Section 382 study to determine the amount of reduction, if any. The annual limitation may result in the expiration of net operating losses and credits before utilization. Under the new enacted law, the carryforward period of net operating losses generated from 2018 forward is indefinite; however,

RAPT THERAPEUTICS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

the carryforward period for net operating losses generated prior to 2018 remains the same. Therefore, the annual limitation may still result in the expiration of certain net operating losses and tax credit carryforwards before their utilization.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits for the years ended December 31, 2017 and 2018 resulting primarily from research and development tax credits claimed on the Company's annual tax returns were as follows (in thousands):

	<u>De</u>	cember 31
	2017	2018
Balance at beginning of year	\$360	\$ 789
Additions on tax positions related to prior years	23	19
Additions on tax positions related to current year	406	473
Balance at end of year	\$789	\$1,281

The Company does not expect that its uncertain tax positions will materially change in the next twelve months. The reversal of uncertain tax benefits would not impact the Company's effective tax rate as the Company continues to maintain a full valuation allowance against its deferred tax assets. In accordance with ASC 740, the Company would classify interest and penalties related to uncertain tax positions in income tax expense, if applicable. There was no interest expense or penalties related to unrecognized tax benefits through December 31, 2018.

The Company files income tax returns in the United States, the State of California and the State of Colorado. The Company is not currently under examination by income tax authorities in federal, state or other jurisdictions. All tax returns remain open for examination by federal and state authorities.

13. Net Loss Per Share

Historical net loss per share

The following table sets forth the computation of the basic and diluted net loss per share of the years ended December 31, 2017 and 2018 (in thousands, except share and per share data):

	Year Ended I	December 31,
	2017	2018
Numerator:		
Net loss	\$ 29,115	\$ 36,147
Denominator:		
Weighted average common shares outstanding	856,451	866,348
Less: weighted-average unvested restricted common stock subject to repurchase	(250,269)	(137,691)
Less: weighted-average unvested early exercised common shares subject to repurchase	(174,504)	(106,368)
Weighted-average shares used to compute net loss per common share, basic and diluted	431,679	622,289
Net loss per share, basic and diluted	\$ 67.45	\$ 58.09

RAPT THERAPEUTICS, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows:

	December 31,		
	2017	2018	
Convertible preferred stock	12,593,942	16,415,281	
Common stock options issued and outstanding	861,690	693,879	
Total	13,455,632	17,109,160	

Unaudited pro forma net loss per share

The following table presents the computation of pro forma basic and diluted net loss per share (in thousands, except share and per share data):

	Dec	r the Year Ended ember 31, 2018
Numerator:		
Net loss	\$	36,147
Denominator:		
Weighted-average shares used to compute net loss per common share, basic and diluted		622,289
Pro forma adjustments to reflect:		
Assumed conversion of convertible preferred stock	13	3,838,797
Weighted-average shares used to compute net loss per share, basic and diluted	14	,461,086
Pro forma net loss per share, basic and diluted	\$	2.50

14. Subsequent Events

In February 2019, the Company entered into an agreement to sublease its facility lease of 6,378 square feet of laboratory and office space with a related party. The sublease has an initial term of eighteen months, expiring August 2020, with an option to extend by an additional six months.

In March 2019, the Company completed a subsequent closing of Series C-2 convertible preferred stock financing at \$2.2925 per share with gross proceeds of \$7.0 million.

Management has reviewed and evaluated subsequent events through May 24, 2019, the date the audited financial statements were available to be issued. No subsequent events have been identified for disclosure, other than the subsequent events noted above.

RAPT THERAPEUTICS, INC. CONDENSED CONSOLIDATED BALANCE SHEETS (In thousands, except share and per share data) (Unaudited)

	December 31, <u>2018</u> (Note 2)	March 31, <u>2019</u>	Pro forma Stockholders' Equity as of March 31, 2019
Assets	` ,		
Current assets:			
Cash and cash equivalents	\$ 63,798	\$ 61,758	
Prepaid expenses and other current assets	1,264	1,466	
Total current assets	65,062	63,224	
Property and equipment, net	4,159	4,247	
Other assets	389	389	
Total assets	\$ 69,610	\$ 67,860	
Liabilities, Convertible Preferred Stock and Stockholders' Deficit			
Current liabilities:			
Accounts payable	\$ 1,771	\$ 1,320	
Accrued expenses	2,488	1,681	
Other current liabilities	384	470	
Total current liabilities	4,643	3,471	
Deferred rent, net of current portion	969	2,082	
Commitments			
Convertible preferred stock, \$0.0001 par value: 104,018,468 shares authorized; 98,491,880 and 101,531,788 shares issued and outstanding at December 31, 2018 and March 31, 2019, respectively; aggregate liquidation preference of \$170,000 and \$176,969 at December 31, 2018 and March 31, 2019; no shares issued and outstanding, pro forma	161,111	168,058	\$ —
Stockholders' Deficit			
Common stock, \$0.0001 par value; 119,200,000 shares authorized; 878,413 and 828,449 shares issued and outstanding at December 31, 2018 and March 31, 2019, respectively; 17,750,380 shares issued and			
outstanding as of March 31, 2019, pro forma	1	1	2
Additional paid-in capital	22,441	22,884	190,941
Related party promissory note for the purchase of common stock	(598)	(491)	(491)
Accumulated other comprehensive loss	(4)	(4)	(4)
Accumulated deficit	(118,953)	(128,141)	(128,141)
Total stockholders' (deficit) equity	(97,113)	(105,751)	\$ 62,307
Total liabilities, convertible preferred stock and stockholders' deficit	\$ 69,610	\$ 67,860	

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

RAPT THERAPEUTICS, INC. CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS (In thousands, except share and per share data) (Unaudited)

		nths Ended ch 31,	
	2018		19
Operating expenses:			
Research and development	\$ 7,306	\$	7,870
General and administrative	1,057		1,674
Total operating expenses	8,363		9,544
Loss from operations	8,363		9,544
Other (income):			
Other (income), net	(132)		(356)
Net loss	\$ 8,231	\$	9,188
Other comprehensive loss			
Total comprehensive loss	\$ 8,231	\$	9,188
Net loss per share, basic and diluted	\$ 15.10	\$	13.28
Weighted average number of shares used in computing net loss per share, basic and diluted	545,142	69	91,834
Pro forma net loss per share, basic and diluted		\$	0.53
Weighted average number of shares used in computing pro forma net loss per share, basic and diluted		17,17	74,802

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

RAPT THERAPEUTICS, INC. CONDENSED CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT (In thousands, except share amounts)

	Convertible I <u>Stocl</u>		Common	Stock .	Additional Paid-In	Related Party Promissory Notes for the Purchase	Accumulated	Accumulated Other Comprehensive	Total Stockholders'
	<u>Shares</u>	Amount	Shares	Amount	Capital	of Common Stock	<u>Deficit</u>	Loss	<u>Deficit</u>
Balance at December 31, 2017 Issuance cost related to Series C convertible preferred stock	75,563,784	\$108,643	880,191	\$ 1	\$ 21,005	\$ (605)	\$ (82,806)	\$ — _	\$ (62,405)
Issuance of common stock upon exercise of stock options, net of repurchase	_	_	_	_	90	_	_	_	90
Repurchase of common stock from related party	_	_	(8,333)		_	17	_	_	17
Interest on promissory notes from related parties for purchase of			(1,222)						
common stock	_	_	_	_	_	(3)	_	_	(3)
Stock-based					20.4				20.4
compensation					294		(0.221)		294
Net loss		<u></u>	-		-		(8,231)		(8,231)
Balance at March 31, 2018	75,563,784	\$108,639	871,858	\$ 1			\$ (91,037)		\$ (70,238)
Balance at December 31, 2018	98,491,880	\$161,111	878,413	\$ 1	\$ 22,441	\$ (598)	\$ (118,953)	(4)	\$ (97,113)
Issuance of Series C-2 convertible preferred stock, net of issuance costs	3,039,908	6,947	_	_	_	_	_	_	_
Issuance of common stock upon exercise of stock options, net of									
repurchase	_	_	3,685	_	66	_	_	_	66
Repurchase of common stock from related party	_	_	(53,649)		_	109	_	_	109
Interest on promissory notes from related parties for purchase of common stock	_	_	_	_	_	(2)	_	_	(2)
Stock-based						(-)			(2)
compensation		_	_	_	377	_	_		377
Net loss	_	_	_	_	_	_	(9,188)	_	(9,188)
Balance at March 31, 2019	101,531,788	\$168,058	828,449	\$ 1	\$ 22,884	\$ (491)	\$ (128,141)	\$ (4)	\$ (105,751)

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

RAPT THERAPEUTICS, INC. CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

	Three Months Ended March 31,	
	2018	2019
Operating activities		
Net loss	\$ (8,231)	\$ (9,188)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	312	331
Stock-based compensation expense	294	377
Noncash interest income (loss), net	(3)	(2)
Changes in operating assets and liabilities:		
Prepaid expenses and other long-term assets	134	(201)
Accounts payable and accrued liabilities	(123)	49
Net cash used in operating activities	(7,617)	(8,634)
Investing activities		
Purchase of property and equipment	(437)	(419)
Net cash used in investing activities	(437)	(419)
Financing activities		
Proceeds from the sale of convertible preferred stock, net of issuance costs	(3)	6,947
Proceeds from issuance of common stock, net of repurchases	90	66
Net cash provided by financing activities	87	7,013
Net increase in cash and cash equivalents	(7,967)	(2,040)
Cash and cash equivalents at beginning of period	47,517	63,798
Cash and cash equivalents at end of period	\$39,550	\$61,758

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

1. Organization and Liquidity Risks

Description of the Business

RAPT Therapeutics, Inc. ("RAPT" or the "Company"), is a clinical-stage, immunology-based biopharmaceutical company focused on discovering, developing and commercializing oral small molecule therapies for patients with significant unmet needs in oncology and inflammatory diseases. Utilizing its proprietary drug discovery and development engine, the Company develops highly selective small molecules that are designed to modulate the critical immune responses underlying these diseases. The Company changed its name from FLX Bio, Inc. to RAPT Therapeutics, Inc.

The Company is located in South San Francisco, California.

Liquidity and Management Plans

The accompanying condensed consolidated financial statements have been prepared assuming that the Company will continue as a going concern. Since inception, the Company has incurred net losses and negative cash flows from operations. During the three months ended March 31, 2019, the Company incurred a net loss of \$9.2 million and used \$8.6 million of cash in operations. At March 31, 2019, the Company had an accumulated deficit of \$128.1 million and does not expect to experience positive cash flows in the foreseeable future.

The Company has historically financed its operations through the sale of convertible preferred stock. The Company has evaluated and concluded there are no conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a period of one year following the date that these condensed consolidated financial statements are issued. Management expects operating losses to continue for the foreseeable future and, therefore, the Company will need to raise additional capital. If sufficient funds on acceptable terms are not available when needed, the Company could be required to significantly reduce its operating expenses and delay, reduce the scope of or eliminate one or more of its development programs. Failure to manage discretionary spending or raise additional financing, as needed, may adversely impact the Company's ability to achieve its intended business objectives.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") for interim financial information and pursuant to Article 10 of Regulation S-X of the Securities Act of 1933, as amended (Securities Act). Accordingly, they do not include all of the information and notes required by U.S. GAAP for complete financial statements. These unaudited condensed consolidated financial statements include only normal and recurring adjustments that the Company believes are necessary to fairly state the Company's financial position and the results of its operations and cash flows. Interim-period results are not necessarily indicative of results of operations or cash flows for a full year or any subsequent interim period. The condensed balance sheet at December 31, 2018 has been derived from audited financial statements at that date but does not include all disclosures required by U.S. GAAP for complete financial statements. Because all of the disclosures required by U.S. GAAP for complete financial statements are not included herein, these unaudited condensed consolidated financial statements and the notes accompanying them should be read in conjunction with our audited consolidated financial statements included elsewhere in this registration statement.

RAPT THERAPEUTICS, INC. NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

Stock Split

On July 19, 2019, the Company filed an amendment to the Company's amended and restated certificate of incorporation to effect a reverse split of shares of the Company's common stock on a one-for-six basis (the Reverse Stock Split). In connection with the Reverse Stock Split, the conversion ratio for the Company's outstanding convertible preferred stock was proportionately adjusted such that the common stock issuable upon conversion of such preferred stock was decreased in proportion to the Reverse Stock Split. The par value of the common stock was not adjusted as a result of the Reverse Stock Split. All references to common stock, options to purchase common stock, early exercised options, share data, convertible preferred stock (to the extent presented on an as-converted to common stock basis) and related information contained in these consolidated financial statements have been retrospectively adjusted to reflect the effect of the Reverse Stock Split for all periods presented.

Unaudited Pro Forma Financial Information

The unaudited pro forma condensed consolidated stockholders' equity as of March 31, 2019 assumes the conversion of all outstanding shares of convertible preferred stock into 16,921,931 shares of common stock immediately prior to the completion of the Company's planned initial public offering ("IPO"). The shares of common stock issuable and the proceeds expected to be received in the IPO are excluded from such pro forma financial information. Pro forma basic and diluted net loss per share has been computed to give effect to the conversion of all outstanding convertible preferred stock into shares of common stock. The unaudited pro forma net loss per share does not include the shares expected to be sold and related proceeds to be received from the initial public offering. The unaudited pro forma net loss per share for the three months ended March 31, 2019 was computed using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding shares of convertible preferred stock into shares of common stock, as if such conversion had occurred at the beginning of the period, or their issuance dates, if later.

Deferred Offering Costs

Deferred offering costs consisting of direct legal, accounting, printing and other fees and costs directly attributable to the Company's planned IPO will be offset against IPO proceeds upon the consummation of the offering. In the event the planned IPO is terminated, all of the deferred offering costs will be expensed. No deferred offering costs were capitalized as of March 31, 2019.

Net Loss Per Share

Basic net loss per share is computed by dividing the net loss by the weighted average number of common shares outstanding during the period, without consideration of potential dilutive securities. Diluted net loss per common share is computed by dividing the net loss by the sum of the weighted average number of common shares outstanding during the period plus the potential dilutive effects of potential dilutive securities outstanding during the period calculated in accordance with the treasury stock method. Diluted net loss per share is the same as basic net loss per share since the effect of potentially dilutive securities is anti-dilutive.

Recent Accounting Pronouncements

The Company has reviewed recent accounting pronouncements and concluded that, other than those presented in the audited financial statements included in this registration statement, the pronouncements are either not applicable to the business or no material impact is expected on the financial statements as a result of adoption at the effective date.

3. Fair Value Measurements

Fair value accounting is applied for all financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually). Financial instruments include cash and cash equivalents, accounts payable and accrued liabilities that approximate fair value due to their relatively short maturities.

Assets and liabilities recorded at fair value on a recurring basis in the balance sheet 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. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities 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 related assets or liabilities; and

Level 3—Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

Financial assets subject to fair value measurements on a recurring basis comprise money market funds that are measured using Level 1 inputs. The money market funds subject to fair value measurements at December 31, 2018 and March 31, 2019 were \$63.8 million and \$61.8 million, respectively, and are included in cash and cash equivalents.

4. Property and Equipment

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

	December 31, 2018	March 31, 2019
Laboratory equipment	\$ 5,466	\$ 5,553
Leasehold improvements	2,989	3,294
Computer equipment	308	336
Furniture and fixtures	365	364
Total property and equipment	9,128	9,547
Less accumulated depreciation and amortization	(4,969)	(5,300)
Property and equipment, net	\$ 4,159	\$ 4,247

Depreciation and amortization expense were \$0.3 million and \$0.3 million for the three months ended March 31, 2018 and 2019, respectively.

5. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	ember 31, 2018	March 31, 2019	
Accrued clinical expenses	\$ 519	\$ 539	
Accrued compensation	1,433	753	
Accrued professional and consulting services	182	332	
Accrued property and equipment	202	_	
Accrued lab supplies	80	37	
Other	72	20	
Total accrued expenses	\$ 2,488	\$ 1,681	

6. Related-Party Promissory Notes

In August 2015 and June 2016, the Company entered into limited recourse promissory notes with the Company's chief executive officer and chief operating officer for the purchase of restricted common stock. The principal amount of the loan with the Company's chief executive officer was \$0.3 million. The principal amount of the loan with the Company's chief operating officer was \$0.3 million. The loans are secured by the shares of common stock of the Company held by the individuals. The loans accrue interest at a rate of 1.82% and 1.41% per annum, respectively, and are due upon the earlier of voluntary termination of services to the Company, filing by the Company of its first registration statement with the Securities and Exchange Commission under the Securities Act of 1933, or sale of substantially all of the Company's assets. In March 2018, the Board of Directors reduced the number of performance based options of its former chief operating officer by 8,333 shares resulting in a \$17,000 reduction to the promissory note. As part of the separation agreement resulting from the chief operating officer's resignation in March 2019, there were 63,019 vested shares and 28,645 unvested shares subject to repurchase. In March 2019 the Company reduced \$109,438 of principal on the promissory note, relating to the unvested shares, which were cancelled and returned to the option pool. As of December 31, 2018 and March 31, 2019, the total outstanding balances under these notes, including accrued interest, were approximately \$0.6 million and \$0.5 million, respectively. Subsequent to March 31, 2019, the Company repurchased 29,686 vested shares from the chief operating officer in exchange for canceling \$65,231 of principal and interest on the promissory note. The Company received cash proceeds of \$73,005 for the remaining 33,333 vested shares issued to the chief operating officer. The notes are recorded within stockholders' deficit.

7. Convertible Preferred Stock and Stockholders' Deficit

Convertible preferred stock

In June 2018, the Company completed a subsequent closing of the Series C convertible preferred stock financing at \$2.2925 per share for \$29.9 million in gross proceeds. Additionally, in December 2018, the Company completed a Series C-2 convertible preferred stock financing at \$2.2925 per share for \$22.6 million in gross proceeds, and between January 2019 and March 2019, the Company completed subsequent closings of Series C-2 convertible preferred stock financing at \$2.2925 per share for \$7.0 million in gross proceeds.

As of March 31, 2019, convertible preferred stock consisted of the following (in thousands, except share amounts):

	Shares <u>Authorized</u>	Shares Issued and Outstanding	Net Carrying <u>Value</u>	Aggregate Liquidation <u>Preference</u>
Series A	37,509,105	37,509,105	\$ 28,862	\$ 37,509
Series B	25,000,000	25,000,000	49,926	50,000
Series C	26,109,363	26,109,363	59,770	59,856
Series C-2	15,400,000	12,913,320	29,500	29,604
Total convertible preferred stock	104,018,468	101,531,788	\$ 168,058	\$ 176,969

8. Common Stock

The holders of the Company's common stock have one vote for each share of common stock held by them. Holders of shares of the Company's common stock are entitled to dividends when, as and if declared by the Board of Directors, subject to the prior rights of the holders of convertible preferred stock. As of December 31, 2018 and March 31, 2019, no dividends had been declared.

As of March 31, 2019, the Company had reserved the following shares of common stock, on an as-converted basis, for future issuance as follows:

Series A convertible preferred stock outstanding	6,251,502
Series B convertible preferred stock outstanding	4,166,663
Series C convertible preferred stock outstanding	4,351,554
Series C-2 convertible preferred stock outstanding	2,566,666
Options issued and outstanding	971,496
Options available for future grants	540,554
Total	18,848,435

9. Stock Option Plan

In 2015, the Company adopted the FLX Bio, Inc. 2015 Stock Plan (the 2015 Plan) for eligible employees, officers, directors, advisors and consultants, which provides for the grant of incentive and non-statutory stock options and restricted shares of common stock. Terms of the stock option agreements, including vesting requirements, are determined by the Board of Directors, subject to the provisions of the 2015 Plan. Options granted generally vest over four years and expire no later than ten years from the date of grant. The estimated fair value of the underlying common stock is determined by the Board of Directors. The exercise price of the incentive stock options must be equal to or greater than the estimated fair value of the underlying common stock on the date of grant.

The following summarizes option activity under the 2015 Plan:

	Shares Available	Number of Shares Outstanding	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term (Years)	Iì	ggregate ntrinsic Value housands)
Balances at December 31, 2018	693,879	768,239	\$ 4.62	8.84	\$	1,291
Stock options authorized	_	_				
Stock options granted	(222,437)	222,437	6.30			
Stock options exercised	_	(4,559)	4.28			
Unvested common shares repurchased	54,519	_	1.19			
Stock options forfeited	14,593	(14,621)	3.58			
Balances at March 31, 2019	540,554	971,496	\$ 4.99	8.92	\$	5,641
Vested and expected to vest at March 31, 2019		971,496		8.84	\$	5,641
Exercisable at March 31, 2019		275,756		8.30	\$	1,927

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, as of December 31, 2018 and March 31, 2019.

During the three months ended March 31, 2018, the Company granted 0.4 million stock options to purchase shares of common stock with a weighted-average grant date fair value of \$4.34 per share and a weighted-average exercise price of \$6.18 share. The grant date fair value of those awards was \$1.9 million. During the three months ended March 31, 2019, the Company granted 0.2 million stock options to purchase shares of common stock with a weighted-average grant date fair value of \$8.50 per share and a weighted-average exercise price of \$6.30 per share. The weighted average fair value of the common stock on the grant dates was \$10.80 per share. The grant date fair value of those awards was \$1.9 million. The intrinsic value of options exercised during the three months ended March 31, 2018 and 2019 was \$13,000 and \$35,000, respectively. The fair value of the 0.1 million and 0.2 million stock options vested during the three months ended March 31, 2018 and 2019 was \$0.3 million and \$0.6 million, respectively.

The Company had 25,000 shares of performance-based stock options to its chief operating officer outstanding as of December 31, 2018. As of December 31, 2018, the Company had not recognized any of the related stock-based compensation expense, as vesting of the awards was not determined to be probable. As a result of the chief operating officer's resignation in March 2019, these performance-based stock options were forfeited and returned to the 2015 Plan.

Employee stock option valuation

The assumptions used to value employee and director stock option awards granted under the 2015 Plan during the three months ended March 31, 2019 and 2018, using the Black-Scholes option pricing model, were as follows:

		For the Three Months Ended March 31,	
	2018	2019	
Fair value of common stock	\$6.18	\$10.80	
Expected term (in years)	5.67 - 6.08	5.96 - 6.05	
Volatility	80.69% - 80.89%	83.00% - 83.25%	
Risk-free interest rate	2.62% - 2.64%	2.23%	
Dividend yield	_	_	

Stock options granted to nonemployees

Stock-based compensation related to stock options granted to non-employees is recognized as the services are rendered. The assumptions used to value non-employee stock option awards granted under the 2015 Plan during the three months ended March 31, 2018 and 2019, using the Black-Scholes option pricing model, were as follows:

		For the Three Months Ended March 31,	
	<u>2018</u>	2019	
Expected term (in years)	7.10 - 10.00	6.10 - 10.00	
Volatility	78.29% - 85.47%	78.29% - 85.47%	
Risk-free interest rate	1.32% - 2.86%	1.32% - 3.19%	
Dividend vield	_	_	

During the three months ended March 31, 2018 and 2019, the Company did not grant options to nonemployee consultants. and recognized expenses of \$29,000 and \$26,000 for previous option grants, respectively.

Early exercise of stock options

The terms of the 2015 Plan permit option holders to exercise stock options before they are vested, subject to certain limitations. Such unvested shares are subject to repurchase by the Company at the original exercise price in the event the option holder's service to the Company is terminated either voluntarily or involuntarily. As a result of early exercises under the 2015 Plan, approximately 0.2 million and 0.1 million shares were subject to repurchase as of December 31, 2018 and March 31, 2019, respectively. The Company treats cash received from the exercise of unvested options as a refundable deposit and classifies such amounts as a liability in its balance sheet. As of December 31, 2018 and March 31, 2019, the Company included cash received for the early exercise of unvested options of \$0.2 million and \$0.1 million, respectively, in other current liabilities. Amounts included in liabilities are transferred into common stock and additional paid-in capital as the shares vest, which is generally over a period of 48 months and may include a one-year cliff.

Stock-based compensation expense

Total stock-based compensation recognized for both employees and non-employees was as follows (in thousands):

		For the Three Months Ended March 31,	
	2018	2019	
Research and development	143	202	
General and administrative	151	175	
Total stock-based compensation expense	\$ 294	\$ 377	

As of March 31, 2019, unrecognized stock-based compensation cost related to outstanding unvested stock options that are expected to vest was \$2.6 million. This unrecognized stock-based compensation cost is expected to be recognized over 2.12 years.

10. Income Taxes

The Company did not record a provision for income taxes for the three months ended March 31, 2019, because the Company has been in a net loss position since inception and expects such losses to continue for the forseeable future. In addition, the deferred tax assets continue to be subject to a full valuation allowance.

11. Net Loss Per Share

Historical net loss per share

The following table sets forth the computation of the basic and diluted net loss per share for the three months ended March 31, 2018 and 2019 (in thousands, except share and per share data):

	Three Mon <u>Marc</u> l	
	2018	2019
Numerator:		
Net loss	\$ 8,231	\$ 9,188
Denominator:		
Weighted average common shares outstanding	872,136	824,384
Less: weighted-average unvested restricted common stock subject to repurchase	(190,399)	(84,982)
Less: weighted-average unvested common shares subject to repurchase	(136,595)	(47,568)
Weighted-average shares used to compute net loss per share, basic and diluted	545,142	691,834
Net loss per share, basic and diluted	\$ 15.10	\$ 13.28

Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows:

		As of March 31,	
	2018	2019	
Convertible preferred stock (as converted)	12,593,942	16,921,931	
Common stock options issued and outstanding	755,743	971,496	
Total	13,349,685	17,893,427	

Unaudited pro forma net loss per share

The following table sets forth the computation of the unaudited pro forma basic and diluted net loss per share (in thousands, except share and per share data):

	Montl	he Three hs Ended n 31, 2019
Numerator:		
Net loss	\$	9,188
Denominator:		
Weighted-average shares used to compute net loss per share, basic and diluted		691,834
Pro forma adjustments to reflect:		
Assumed conversion of convertible preferred stock	16,	482,968
Weighted-average shares used to compute net loss per share, basic and diluted	17,	174,802
Pro forma net loss per share, basic and diluted	\$	0.53

12. Subsequent Events

In June 2019, the Company sold 3,271,537 shares of Series C-2 convertible preferred stock at \$2.2925 per share for net proceeds for \$7.5 million.

In June 2019, the Company forgave \$353,951, which was the entire amount of principal and accrued interest due on the note from its president and chief executive officer.

For purposes of the condensed consolidated financial statements as of March 31, 2019 and the three months then ended, the Company has evaluated subsequent events through July 22, 2019. No subsequent events other than the above have been identified for disclosure.

Through and including , 2019, (the 25th day after the date of this prospectus), all dealers effecting transactions in the common stock, whether or not participating in this offering, may be required to deliver a prospectus. This delivery requirement is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

5,000,000 Shares



Common Stock

PROSPECTUS

BofA Merrill Lynch
Wells Fargo Securities
BMO Capital Markets
UBS Investment Bank

, 2019

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the SEC registration fee, the Financial Industry Regulatory Authority, Inc. ("FINRA") filing fee and the exchange listing fee.

	Amount
SEC registration fee	\$ 11,150
FINRA filing fee	14,300
Exchange listing fee	150,000
Accountants' fees and expenses	1,600,000
Legal fees and expenses	1,600,000
Transfer agent's fees and expenses	20,000
Printing and engraving expenses	320,000
Miscellaneous	84,550
Total expenses	\$ 3,800,000

Item 14. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law authorizes a court to award, or a corporation's board of directors to grant, indemnity to directors and officers in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities, including reimbursement for expenses incurred, arising under the Securities Act. Our amended and restated certificate of incorporation that will be in effect upon the closing of this offering permits indemnification of our directors, officers, employees and other agents to the maximum extent permitted by the Delaware General Corporation Law, and our amended and restated bylaws that will be in effect on the closing of this offering provide that we will indemnify our directors and officers and permit us to indemnify our employees and other agents, in each case to the maximum extent permitted by the Delaware General Corporation Law.

We have entered into indemnification agreements with our directors and officers, whereby we have agreed to indemnify our directors and officers to the fullest extent permitted by law, including indemnification against expenses and liabilities incurred in legal proceedings to which the director or officer was, or is threatened to be made, a party by reason of the fact that such director or officer is or was a director, officer, employee or agent of RAPT Therapeutics, Inc., provided that such director or officer acted in good faith and in a manner that the director or officer reasonably believed to be in, or not opposed to, the best interest of RAPT Therapeutics, Inc. At present, there is no pending litigation or proceeding involving a director or officer of RAPT Therapeutics, Inc. regarding which indemnification is sought, nor is the registrant aware of any threatened litigation that may result in claims for indemnification.

We maintain insurance policies that indemnify our directors and officers against various liabilities arising under the Securities Act and the Exchange Act that might be incurred by any director or officer in his or her capacity as such.

Item 15. Recent Sales of Unregistered Securities.

Since January 1, 2016, we have issued the following unregistered securities:

Sales of Preferred Stock

- (1) In April 2016, we sold an aggregate of 25,000,000 shares of Series B preferred stock to a total of 9 accredited investors at a purchase price per share of \$2.00 for an aggregate purchase price of \$50 million.
- (2) In December 2017 and June 2018, we sold an aggregate of 26,109,363 shares of Series C preferred stock to a total of 10 accredited investors at a purchase price per share of \$2.2925 for an aggregate purchase price of approximately \$59.9 million.
- (3) In December 2018, from January through March 2019 and in June 2019, we sold an aggregate of 16,184,857 shares of Series C-2 convertible preferred stock to a total of 24 accredited investors at a purchase price per share of \$2.2925 for an aggregate purchase price of approximately \$37.1 million.

Option and Common Stock Issuances

- (1) From January 1, 2016 through July 19, 2019, we granted to certain employees, consultants and directors options to purchase an aggregate of 1,475,196 shares of our common stock under our 2015 Plan at exercise prices ranging from \$1.02 to \$13.62 per share. In addition, in June 2019 we granted to certain employees, consultants and directors options to purchase an aggregate of 173,079 shares, with an exercise price equal to the price per share to the public in this offering.
- (2) From January 1, 2016 through July 19, 2019, we issued an aggregate of 391,368 shares of our common stock upon the exercise of options granted under our 2015 Plan, at exercise prices ranging from \$1.02 to \$6.18 per share, for an aggregate exercise price of \$0.8 million.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. Unless otherwise stated, the sales of the above securities were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act (and Regulation D or Regulation S promulgated thereunder) or Rule 701 promulgated under Section 3(b) of the Securities Act as transactions by an issuer not involving any public offering or pursuant to benefit plans and contracts relating to compensation as provided under Rule 701. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to, or for sale in connection with, any distribution thereof, and appropriate legends were placed on the share certificates issued in these transactions. All recipients had adequate access, through their relationships with us, to information about us. The sales of these securities were made without any general solicitation or advertising.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits.

Evhibit

<u>Number</u>	Description of Exhibit
1.1	Form of Underwriting Agreement.
3.1†	Amended and Restated Certificate of Incorporation of RAPT Therapeutics, Inc., as currently in effect.
3.2†	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of RAPT Therapeutics, Inc., dated May 20, 2019, as currently in effect.

Exhibit <u>Number</u>	Description of Exhibit
3.3†	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of RAPT Therapeutics, Inc., dated June 6, 2019, as
	<u>currently in effect.</u>
3.4	<u>Certificate of Amendment to the Amended and Restated Certificate of Incorporation of RAPT Therapeutics, Inc., dated July 19, 2019, as currently in effect.</u>
3.5†	Form of Amended and Restated Certificate of Incorporation of RAPT Therapeutics, Inc., to be effective upon the completion of this offering.
3.6†	Bylaws of RAPT Therapeutics, Inc., as currently in effect.
3.7	Form of Amended and Restated Bylaws of RAPT Therapeutics, Inc., to be effective on the completion of this offering.
4.1	Form of common stock certificate of RAPT Therapeutics, Inc.
5.1	Opinion of Cooley LLP.
10.1†	Amended and Restated Investors' Rights Agreement by and among RAPT Therapeutics, Inc. and certain of its stockholders, dated December 18, 2018.
10.2+†	RAPT Therapeutics, Inc. 2015 Stock Plan, as amended.
10.3+†	Forms of Stock Option Agreement, Notice of Stock Option Grant and Notice of Stock Option Exercise under the 2015 Stock Plan.
10.4+	RAPT Therapeutics, Inc. 2019 Equity Incentive Plan.
10.5+	Forms of Stock Option Agreement, Notice of Stock Option Grant and Notice of Stock Option Exercise under the 2019 Equity Incentive Plan.
10.6+	Form of Restricted Stock Unit Award Agreement and Restricted Stock Unit Grant Notice under the 2019 Equity Incentive Plan.
10.7+	RAPT Therapeutics, Inc. 2019 Employee Stock Purchase Plan.
10.8+	Form of Indemnification Agreement by and between RAPT Therapeutics, Inc. and each of its directors and executive officers.
10.9+	Amended and Restated Employee Offer Letter, by and between Brian Wong and RAPT Therapeutics, Inc., dated July 20, 2019.
10.10+	Amended and Restated Employee Offer Letter, by and between William Ho and RAPT Therapeutics, Inc., dated July 20, 2019.
10.11+	Amended and Restated Employee Offer Letter, by and between Dirk Brockstedt and RAPT Therapeutics, Inc., dated July 20, 2019.
10.12+	Employee Offer Letter, by and between Rekha Hemrajani and RAPT Therapeutics, Inc., dated March 17, 2016.
10.13+	Separation and Consulting Agreement, by and between Rekha Hemrajani and RAPT Therapeutics, Inc., dated March 19, 2019.
10.14+	Amendment to the Separation and Consulting Agreement, by and between Rekha Hemrajani and RAPT Therapeutics, Inc., dated April 30, 2019.
10.15+	Board of Directors Agreement, by and between Linda Kozick and RAPT Therapeutics, Inc., dated November 15, 2016.
10.16+	Board of Directors Agreement, by and between Michael F. Giordano and RAPT Therapeutics, Inc., dated January 12, 2018.
10.17+	Board of Directors Agreement, by and between William Rieflin and RAPT Therapeutics, Inc., dated June 23, 2015.

Exhibit <u>Number</u>	Description of Exhibit
10.18†	Lease, by and between HCP, Inc. and Flexus Biosciences, Inc., dated October 10, 2014.
10.19†	First Amendment to Lease, by and between HCP, Inc. and RAPT Therapeutics, Inc., dated April 29, 2015.
10.20†	Second Amendment to Lease, by and between HCP, Inc. and RAPT Therapeutics, Inc., dated April 16, 2018.
10.21†	Third Amendment to Lease, by and between HCP, Inc. and RAPT Therapeutics, Inc., dated December 13, 2018.
10.22#	Clinical Trial Collaboration and Supply Agreement, dated as of November 1, 2018, by and between MSD International GmbH and RAPT Therapeutics, Inc.
10.23+	Non-Employee Director Compensation Policy
23.1	Consent of independent registered public accounting firm.
23.2	Consent of Cooley LLP (included in Exhibit 5.1).
24.1†	Power of Attorney.

- † Previously filed.
- + Indicates management contract or compensatory plan.
- # Portions of this exhibit (indicated by asterisks) have been omitted as the registrant has determined that (i) the omitted information is not material and (ii) the omitted information would likely cause competitive harm to the registrant if publicly disclosed.
 - (b) Financial Statement Schedules.

All financial statement schedules are omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or the notes thereto.

Item 17. Undertakings.

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.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant under 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. If 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 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 under 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of South San Francisco, State of California, on July 22, 2019.

RAPT THERAPEUTICS, INC.

By: /s/ Brian Wong, M.D., Ph.D.

Brian Wong, M.D., Ph.D.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Brian Wong, M.D., Ph.D.	President, Chief Executive Officer and Director	July 22, 2019
Brian Wong, M.D., Ph.D.	(Principal Executive Officer)	
/s/ Eric Hall	Interim Chief Financial Officer and Secretary	July 22, 2019
Eric Hall	(Principal Financial Officer)	
/s/ Karen C. Lam	Vice President, Finance and Corporate Controller	July 22, 2019
Karen C. Lam	(Principal Accounting Officer)	
*	— Chair of the Board of Directors	July 22, 2019
William Rieflin	Chair of the Board of Directors	
*	Division	July 22, 2019
Michael F. Giordano, M.D.	— Director	
*		July 22, 2019
David V. Goeddel, Ph.D.	— Director	3 .
*		July 22, 2019
Linda Kozick	— Director	vary == , = 010
* Pursuant to the Power of Attorney		
By: /s/ Brian Wong, M.D., Ph.D.		
Brian Wong, M.D., Ph.D.		

Attorney-in-Fact

RAPT Therapeutics, Inc.

(a Delaware corporation)

[•] Shares of Common Stock

UNDERWRITING AGREEMENT

Dated: [●], 2019

RAPT Therapeutics, Inc.

(A Delaware corporation)

[•] Shares of Common Stock

UNDERWRITING AGREEMENT

 $[\bullet], 2019$

BofA Securities, Inc.
Wells Fargo Securities, LLC
BMO Capital Markets Corp.
UBS Securities LLC
as Representatives of the several Underwriters

c/o BofA Securities, Inc.

One Bryant Park New York, New York 10036

c/o Wells Fargo Securities, LLC

375 Park Avenue New York, NY 10152

c/o BMO Capital Markets Corp.

3 Times Square, 25th Floor New York, New York 10036

c/o UBS Securities LLC

1285 Avenue of the Americas New York, New York 10019

Ladies and Gentlemen:

RAPT Therapeutics, Inc., a Delaware corporation (the "Company"), confirms its agreement with BofA Securities, Inc. ("BofAS") and each of the other Underwriters named in Schedule A hereto (collectively, the "Underwriters," which term shall also include any underwriter substituted as hereinafter provided in Section 10 hereof), for whom BofAS, Wells Fargo Securities, LLC, BMO Capital Markets Corp., and UBS Securities LLC are acting as representatives (in such capacity, the "Representatives"), with respect to (i) the sale by the Company and the purchase by the Underwriters, acting severally and not jointly, of the respective numbers of shares of Common Stock, par value \$0.0001 per share, of the Company ("Common Stock") set forth in Schedule A hereto and (ii) the grant by the Company to the Underwriters, acting severally and not jointly, of the option described in Section 2(b) hereof to purchase all or any part of [•] additional shares of Common Stock. The aforesaid [•] shares of Common Stock (the "Initial Securities") to be purchased by the Underwriters and all or any part of the [•] shares of Common Stock subject to the option described in Section 2(b) hereof (the "Option Securities") are herein called, collectively, the "Securities."

The Company understands that the Underwriters propose to make a public offering of the Securities as soon as the Representatives deem advisable after this Agreement has been executed and delivered.

The Company and the Underwriters agree that up to [•] shares of the Initial Securities to be purchased by the Underwriters (the "Reserved Securities") shall be reserved for sale by Merrill Lynch, Pierce, Fenner & Smith Incorporated (an affiliate of BofAS, hereinafter referred to as "Merrill Lynch") to certain persons designated by the Company (the "Invitees"), as part of the distribution of the Securities by the Underwriters, subject to the terms of this Agreement, the applicable rules, regulations and interpretations of the Financial Industry Regulatory Authority, Inc. ("FINRA") and all other applicable laws, rules and regulations. The Company solely determined, without any direct or indirect participation by the Underwriters or Merrill Lynch, the Invitees who will purchase Reserved Securities (including the amount to be purchased by such persons) sold by Merrill Lynch. To the extent that such Reserved Securities are not orally confirmed for purchase by Invitees by 11:59 P.M. (New York City time) on the date of this Agreement, such Reserved Securities may be offered to the public as part of the public offering contemplated hereby.

The Company has filed with the Securities and Exchange Commission (the "Commission") a registration statement on Form S-1 (No. 333-232572), including the related preliminary prospectus or prospectuses, covering the registration of the sale of the Securities under the Securities Act of 1933, as amended (the "1933 Act"). Promptly after execution and delivery of this Agreement, the Company will prepare and file a prospectus in accordance with the provisions of Rule 430A ("Rule 430A") of the rules and regulations of the Commission under the 1933 Act (the "1933 Act Regulations") and Rule 424(b) ("Rule 424(b)") of the 1933 Act Regulations. The information included in such prospectus that was omitted from such registration statement at the time it became effective but that is deemed to be part of such registration statement at the time it became effective pursuant to Rule 430A(b) is herein called the "Rule 430A Information." Such registration statement, including the amendments thereto, the exhibits thereto and any schedules thereto, at the time it became effective, and including the Rule 430A Information, is herein called the "Registration Statement." Any registration statement filed pursuant to Rule 462(b) of the 1933 Act Regulations is herein called the "Rule 462(b) Registration Statement" and, after such filing, the term "Registration Statement" shall include the Rule 462(b) Registration Statement. Each prospectus used prior to the effectiveness of the Registration Statement, and each prospectus that omitted the Rule 430A Information that was used after such effectiveness and prior to the execution and delivery of this Agreement, is herein called a "preliminary prospectus." The final prospectus, in the form first furnished to the Underwriters for use in connection with the offering of the Securities, is herein called the "Prospectus." For purposes of this Agreement, all references to the Registration Statement, any preliminary prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall

As used in this Agreement:

"Applicable Time" means [__:00 P./A.M.], New York City time, on [INSERT DATE] or such other time as agreed by the Company and the Representatives.

"General Disclosure Package" means any Issuer General Use Free Writing Prospectuses issued at or prior to the Applicable Time, the most recent preliminary prospectus that is distributed to investors prior to the Applicable Time and the information included on Schedule B-1 hereto, all considered together.

"Issuer Free Writing Prospectus" means any "issuer free writing prospectus," as defined in Rule 433 of the 1933 Act Regulations ("Rule 433"), including without limitation any "free writing

prospectus" (as defined in Rule 405 of the 1933 Act Regulations ("Rule 405")) relating to the Securities that is (i) required to be filed with the Commission by the Company, (ii) a "road show that is a written communication" within the meaning of Rule 433(d)(8)(i), whether or not required to be filed with the Commission, or (iii) exempt from filing with the Commission pursuant to Rule 433(d)(5)(i) because it contains a description of the Securities or of the offering that does not reflect the final terms, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g).

"Issuer General Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors (other than a "bona fide electronic road show," as defined in Rule 433 (the "Bona Fide Electronic Road Show")), as evidenced by its being specified in Schedule B-2 hereto.

"Issuer Limited Use Free Writing Prospectus" means any Issuer Free Writing Prospectus that is not an Issuer General Use Free Writing Prospectus.

"Testing-the-Waters Communication" means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the 1933 Act.

"Written Testing-the-Waters Communication" means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the 1933 Act.

SECTION 1. Representations and Warranties.

- (a) Representations and Warranties by the Company. The Company represents and warrants to each Underwriter as of the date hereof, the Applicable Time, the Closing Time (as defined below) and any Date of Delivery (as defined below), and agrees with each Underwriter, as follows:
 - (i) <u>Registration Statement and Prospectuses</u>. Each of the Registration Statement and any amendment thereto has become effective under the 1933 Act. No stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated. The Company has complied with each request (if any) from the Commission for additional information.

Each of the Registration Statement and any post-effective amendment thereto, at the time it became effective, the Applicable Time, the Closing Time and any Date of Delivery complied and will comply in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus, the Prospectus and any amendment or supplement thereto, at the time each was filed with the Commission, and, in each case, at the Applicable Time, the Closing Time and any Date of Delivery complied and will comply in all material respects with the requirements of the 1933 Act and the 1933 Act Regulations. Each preliminary prospectus delivered to the Underwriters for use in connection with this offering and the Prospectus was or will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(ii) <u>Accurate Disclosure</u>. Neither the Registration Statement nor any amendment thereto, at its effective time, on the date hereof, at the Closing Time or at any Date of Delivery, contained, contains or will contain an untrue statement of a material fact or omitted, omits or will

omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading. At the Applicable Time and any Date of Delivery, none of (A) the General Disclosure Package, (B) any individual Issuer Limited Use Free Writing Prospectus, when considered together with the General Disclosure Package and (C) any individual Written Testing-the-Waters Communication, when considered together with the General Disclosure Package, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. Neither the Prospectus nor any amendment or supplement thereto, as of its issue date, at the time of any filing with the Commission pursuant to Rule 424(b), at the Closing Time or at any Date of Delivery, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

The representations and warranties in this subsection shall not apply to statements in or omissions from the Registration Statement (or any amendment thereto), the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) made in reliance upon and in conformity with written information furnished to the Company by any Underwriter through the Representatives expressly for use therein. For purposes of this Agreement, the only information so furnished shall be the information in the first paragraph under the heading "Underwriting—Commissions and Discounts," the information in the second, third and fourth paragraphs under the heading "Underwriting—Price Stabilization, Short Positions and Penalty Bids" and the information under the heading "Underwriting—Electronic Distribution" in each case contained in the Prospectus (collectively, the "Underwriter Information").

- (iii) <u>Issuer Free Writing Prospectuses</u>. No Issuer Free Writing Prospectus conflicts or will conflict with the information contained in the Registration Statement or the Prospectus, and any preliminary or other prospectus deemed to be a part thereof that has not been superseded or modified. The Company has made available a Bona Fide Electronic Road Show in compliance with Rule 433(d)(8)(ii) such that no filing of any "road show" (as defined in Rule 433(h)) is required in connection with the offering of the Securities.
- (iv) <u>Testing-the-Waters Materials</u>. The Company (A) has not engaged in any Testing-the-Waters Communication other than Testing-the-Waters Communications with the consent of the Representatives with entities that are qualified institutional buyers within the meaning of Rule 144A under the 1933 Act or institutions that are accredited investors within the meaning of Rule 501 under the 1933 Act and (B) has not authorized anyone other than the Representatives to engage in Testing-the-Waters Communications. The Company reconfirms that the Representatives have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Written Testing-the-Waters Communications other than those listed on Schedule B-2 hereto.
- (v) <u>Company Not Ineligible Issuer</u>. At the time of filing the Registration Statement and any post-effective amendment thereto, at the earliest time thereafter that the Company or another offering participant made a *bona fide* offer (within the meaning of Rule 164(h)(2) of the 1933 Act Regulations) of the Securities and at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405, without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer.

- (vi) <u>Emerging Growth Company Status.</u> From the time of the initial confidential submission of the Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged directly or through any Person authorized to act on its behalf in any Testing-the-Waters Communication) through the date hereof, the Company has been and is an "emerging growth company," as defined in Section 2(a) of the 1933 Act (an "Emerging Growth Company").
- (vii) <u>Independent Accountants</u>. The accountants who certified the financial statements and supporting schedules included in the Registration Statement, the General Disclosure Package and the Prospectus are independent public accountants as required by the 1933 Act, the 1933 Act Regulations and the Public Company Accounting Oversight Board.
- (viii) Financial Statements. The financial statements included in the Registration Statement, the General Disclosure Package and the Prospectus, together with the related schedules and notes, present fairly in all material respects the financial position of the Company and its consolidated subsidiaries at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company and its consolidated subsidiaries for the periods specified; said financial statements have been prepared in conformity with U.S. generally accepted accounting principles ("GAAP") applied on a consistent basis throughout the periods involved. The supporting schedules, if any, present fairly in accordance with GAAP the information required to be stated therein in all material respects. The selected financial data and the summary financial information included in the Registration Statement, the General Disclosure Package and the Prospectus present fairly in all material respects the information shown therein and have been compiled on a basis consistent with that of the audited financial statements included therein. Except as included therein, no historical or pro forma financial statements or supporting schedules are required to be included or incorporated by reference in the Registration Statement, the General Disclosure Package or the Prospectus under the 1933 Act or the 1933 Act Regulations. The interactive data in eXtensible Business Reporting Language included in the Registration Statement, the General Disclosure Package and the Prospectus fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.
- (ix) No Material Adverse Change in Business. Except as otherwise stated therein, since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, (A) there has been no material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business (a "Material Adverse Effect"), (B) there have been no transactions entered into by the Company or any of its subsidiaries, other than those in the ordinary course of business, which are material with respect to the Company and its subsidiaries considered as one enterprise, and (C) there has been no dividend or distribution of any kind declared, paid or made by the Company on any class of its capital stock.
- (x) Good Standing of the Company. The Company has been duly organized and is validly existing as a corporation in good standing under the laws of the State of Delaware and has corporate power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and to enter into and perform its obligations under this Agreement; and the Company is duly qualified as a foreign corporation to transact business and is in good standing in each other jurisdiction in which such qualification is required, whether by reason of the ownership or leasing of property or the conduct of business, except where the failure so to qualify or to be in good standing would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

- (xi) Good Standing of Subsidiaries. Each subsidiary (each, a "Subsidiary" and, collectively, the "Subsidiaries") has been duly organized and is validly existing in good standing under the laws of the jurisdiction of its incorporation or organization (to the extent the concept of "good standing" is applicable in each such jurisdiction), has corporate or similar power and authority to own, lease and operate its properties and to conduct its business as described in the Registration Statement, the General Disclosure Package and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction in which such qualification is required (to the extent the concepts of "qualification to transact business" and "good standing" are applicable in each such jurisdiction), whether by reason of the ownership or leasing of property or the conduct of business, except where the failure to so qualify or to be in good standing would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. Except as otherwise disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, all of the issued and outstanding capital stock of each Subsidiary has been duly authorized and validly issued, is fully paid and non-assessable (to the extent such concepts are applicable in each such jurisdiction) and is owned by the Company, directly or through subsidiaries, free and clear of any security interest, mortgage, pledge, lien, encumbrance, claim or equity. None of the outstanding shares of capital stock of any Subsidiary were issued in violation of the preemptive or similar rights of any securityholder of such Subsidiary. The only subsidiaries of the Company are the subsidiaries listed on Exhibit 21 to the Registration Statement.
- (xii) <u>Capitalization</u>. The authorized, issued and outstanding shares of capital stock of the Company are as set forth in the Registration Statement, the General Disclosure Package and the Prospectus in the column entitled "Actual" under the caption "Capitalization" (except for subsequent issuances, if any, pursuant to this Agreement, pursuant to reservations, agreements or employee benefit plans referred to in the Registration Statement, the General Disclosure Package and the Prospectus or pursuant to the exercise of convertible securities or options referred to in the Registration Statement, the General Disclosure Package and the Prospectus). The outstanding shares of capital stock of the Company have been duly authorized and validly issued and are fully paid and non-assessable. None of the outstanding shares of capital stock of the Company were issued in violation of the preemptive or other similar rights of any securityholder of the Company.
 - (xiii) Authorization of Agreement. This Agreement has been duly authorized, executed and delivered by the Company.
- (xiv) <u>Authorization and Description of Securities</u>. The Securities to be purchased by the Underwriters from the Company have been duly authorized for issuance and sale to the Underwriters pursuant to this Agreement and, when issued and delivered by the Company pursuant to this Agreement against payment of the consideration set forth herein, will be validly issued and fully paid and non-assessable; and the issuance of the Securities is not subject to the preemptive or other similar rights of any securityholder of the Company, except as have been duly and validly waived in writing as of the date of this Agreement. The Common Stock conforms to all statements relating thereto contained in the Registration Statement, the General Disclosure Package and the Prospectus and such description conforms in all material respects to the rights set forth in the instruments defining the same. No holder of Securities will be subject to personal liability solely by reason of being such a holder.
- (xv) <u>Registration Rights</u>. There are no persons with registration rights or other similar rights to have any securities registered for sale pursuant to the Registration Statement or otherwise registered for sale or sold by the Company under the 1933 Act pursuant to this Agreement, other than those rights that have been disclosed in the Registration Statement, the General Disclosure Package and the Prospectus and have been waived.

- (xvi) Absence of Violations, Defaults and Conflicts. Neither the Company nor any of its subsidiaries is (A) in violation of its charter, by-laws or similar organizational document, (B) in default in the performance or observance of any obligation, agreement, covenant or condition contained in any contract, indenture, mortgage, deed of trust, loan or credit agreement, note, lease or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which it or any of them is bound or to which any of the properties or assets of the Company or any subsidiary is subject (collectively, "Agreements and Instruments"), except for such defaults that would not, singly or in the aggregate, result in a Material Adverse Effect, or (C) in violation of any law, statute, rule, regulation, judgment, order, writ or decree of any arbitrator, court, governmental body, regulatory body, administrative agency or other authority, body or agency having jurisdiction over the Company or any of its subsidiaries or any of their respective properties, assets or operations (each, a "Governmental Entity"), except for such violations that would not, singly or in the aggregate, result in a Material Adverse Effect. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated herein and in the Registration Statement, the General Disclosure Package and the Prospectus (including the issuance and sale of the Securities and the use of the proceeds from the sale of the Securities as described therein under the caption "Use of Proceeds") and compliance by the Company with its obligations hereunder have been duly authorized by all necessary corporate action and do not and will not, whether with or without the giving of notice or passage of time or both, conflict with or constitute a breach of, or default or Repayment Event (as defined below) under, or result in the creation or imposition of any lien, charge or encumbrance upon any properties or assets of the Company or any subsidiary pursuant to, the Agreements and Instruments (except for such conflicts, breaches, defaults or Repayment Events or liens, charges or encumbrances that would not, singly or in the aggregate, result in a Material Adverse Effect), nor will such action result in any violation of the provisions of the charter, by-laws or similar organizational document of the Company or any of its subsidiaries or any law, statute, rule, regulation, judgment, order, writ or decree of any Governmental Entity. As used herein, a "Repayment Event" means any event or condition which gives the holder of any note, debenture or other evidence of indebtedness (or any person acting on such holder's behalf) the right to require the repurchase, redemption or repayment of all or a portion of such indebtedness by the Company or any of its subsidiaries.
- (xvii) <u>Absence of Labor Dispute</u>. No labor dispute with the employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is imminent, and the Company is not aware of any existing or imminent labor disturbance by the employees of any of its or any subsidiary's principal suppliers, manufacturers, customers or contractors, which, in either case, would result in a Material Adverse Effect.
- (xviii) Absence of Proceedings. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, there is no action, suit, proceeding, inquiry or investigation before or brought by any Governmental Entity now pending or, to the knowledge of the Company, threatened, against or affecting the Company or any of its subsidiaries, which would reasonably be expected to result in a Material Adverse Effect, or which would reasonably be expected to materially and adversely affect their respective properties or assets or the consummation of the transactions contemplated in this Agreement or the performance by the Company of its obligations hereunder; and the aggregate of all pending legal or governmental proceedings to which the Company or any such subsidiary is a party or of which any of their respective properties or assets is the subject which are not described in the Registration Statement, the General Disclosure Package and the Prospectus, including ordinary routine litigation incidental to the business, could not result in a Material Adverse Effect.

- (xix) Accuracy of Exhibits. There are no contracts or documents which are required to be described in the Registration Statement, the General Disclosure Package or the Prospectus or to be filed as exhibits to the Registration Statement which have not been so described and filed as required.
- (xx) Absence of Further Requirements. No filing with, or authorization, approval, consent, license, order, registration, qualification or decree of, any Governmental Entity is necessary or required for the performance by the Company of its obligations hereunder, in connection with the offering, issuance or sale of the Securities hereunder or the consummation of the transactions contemplated by this Agreement, except (A) such as have been already obtained or as may be required under the 1933 Act, the 1933 Act Regulations, the rules of the Nasdaq Global Market, state securities laws or the rules of FINRA and (B) such as have been obtained under the laws and regulations of jurisdictions outside the United States in which the Reserved Securities were offered.
- (xxi) <u>Possession of Licenses and Permits</u>. The Company and its subsidiaries possess such permits, licenses, approvals, consents and other authorizations (collectively, "Governmental Licenses") issued by the appropriate Governmental Entities necessary to conduct the business now operated by them, except where the failure so to possess would not, singly or in the aggregate, result in a Material Adverse Effect. The Company and its subsidiaries are in compliance with the terms and conditions of all Governmental Licenses, except where the failure so to comply would not, singly or in the aggregate, result in a Material Adverse Effect. All of the Governmental Licenses are valid and in full force and effect, except when the invalidity of such Governmental Licenses or the failure of such Governmental Licenses to be in full force and effect would not, singly or in the aggregate, result in a Material Adverse Effect. Neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any Governmental Licenses which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would result in a Material Adverse Effect.
- (xxii) Title to Property. The Company and its subsidiaries have good and marketable title to all real property owned by them and good title to all other properties owned by them, in each case, free and clear of all mortgages, pledges, liens, security interests, claims, restrictions or encumbrances of any kind except such as (A) are described in the Registration Statement, the General Disclosure Package and the Prospectus or, (B) do not, singly or in the aggregate, materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company or any of its subsidiaries; and all of the leases and subleases material to the business of the Company and its subsidiaries, considered as one enterprise, and under which the Company or any of its subsidiaries holds properties described in the Registration Statement, the General Disclosure Package or the Prospectus, are in full force and effect, and neither the Company nor any such subsidiary has any notice of any claim of any sort that has been asserted by anyone adverse to the rights of the Company or any subsidiary under any of the leases or subleases mentioned above, or affecting or questioning the rights of the Company or such subsidiary to the continued possession of the leased or subleased premises under any such lease or sublease, except to the extent that any such failure to be in full force and effect or any such claim could not reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect.
- (xxiii) <u>Possession of Intellectual Property</u>. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus or would not, singly or in the aggregate, result in a Material Adverse Effect, (i) the Company and its subsidiaries own, possess or can promptly obtain on commercially reasonable terms a valid and enforceable license to use,

all patents, patent rights, licenses, inventions, copyrights, technology, software, databases, know-how (including any trade secrets and any other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks, trade names, trade dress, domain names and other source identifiers, and any other similar intellectual property or proprietary rights in any jurisdiction throughout the world (including any and all issuances and registrations and applications for issuance or registration of, and all goodwill associated with, any of the foregoing, as applicable) (collectively, "Intellectual Property") used or held for use in, or otherwise necessary to, the conduct of the business as now operated by them and as proposed to be operated in the Registration Statement, the General Disclosure Package and the Prospectus; (ii) to the knowledge of the Company, the Company's and its subsidiaries' conduct of their business does not infringe, misappropriate or otherwise violate, and has not infringed, misappropriated or otherwise violated, asserted rights of any others with respect to any Intellectual Property (it being understood that the foregoing representation and warranty is made without giving effect to any exemption under applicable law to which the Company may be entitled (e.g., 35 U.S.C. Section 271(e)(1)); (iii) neither the Company nor any of its subsidiaries has received any notice or is otherwise aware of, (A) any pending or threatened action, suit, proceeding or claim by any third party against the Company or any of its subsidiaries (x) alleging that the Company or any of its subsidiaries has infringed, misappropriated or otherwise violated any Intellectual Property, (y) challenging the ownership, validity, enforceability or scope of any Intellectual Property owned by or licensed to the Company or any of its subsidiaries or (z) challenging the Company's or any of its subsidiaries' rights in or to any of the Intellectual Property or (B) any facts that would form a reasonable basis for any such action, suit, proceeding or claim; (iv) to the knowledge of the Company, the Intellectual Property of the Company and its subsidiaries has not been infringed, misappropriated or otherwise violated by any third party; (v) all Intellectual Property owned by the Company or any of its subsidiaries is owned solely and exclusively by the Company or such subsidiaries and the Company and its subsidiaries own such Intellectual Property and hold all of their rights under all Intellectual Property licensed to them, in each case, free and clear of all liens, encumbrances, defects or other restrictions; and (vi) the Company and its subsidiaries have taken reasonable steps in accordance with normal industry standards and practices to maintain the confidentiality of all Intellectual Property of the Company and its subsidiaries the value of which to the Company or any of its subsidiaries is contingent upon maintaining the confidentiality thereof and, to the knowledge of the Company, no such Intellectual Property has been disclosed other than to employees, representatives and agents of the Company or any of its subsidiaries, all of whom are bound by written and enforceable confidentiality agreements.

Environmental Laws. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus or would not, singly or in the aggregate, result in a Material Adverse Effect, (A) neither the Company nor any of its subsidiaries is in violation of any federal, state, local or foreign statute, law, rule, regulation, ordinance, code, policy or rule of common law or any judicial or administrative interpretation thereof, including any judicial or administrative order, consent, decree or judgment, relating to pollution or protection of human health, the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata) or wildlife, including, without limitation, laws and regulations relating to the release or threatened release of chemicals, pollutants, contaminants, wastes, toxic substances, hazardous substances, petroleum or petroleum products, asbestos-containing materials or mold (collectively, "Hazardous Materials") or to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials (collectively, "Environmental Laws"), (B) the Company and its subsidiaries have all permits, authorizations and approvals required under any applicable Environmental Laws and are each in compliance with their requirements, (C) there are no pending or, to the Company's knowledge, threatened administrative, regulatory or judicial actions, suits, demands, demand letters, claims, liens, notices of

noncompliance or violation, investigations or proceedings relating to any Environmental Law against the Company or any of its subsidiaries and (D) to the Company's knowledge, there are no events or circumstances that would reasonably be expected to form the basis of an order for clean-up or remediation, or an action, suit or proceeding by any private party or Governmental Entity, against or affecting the Company or any of its subsidiaries relating to Hazardous Materials or any Environmental Laws.

(xxv) Healthcare Laws. The Company has operated at all times and is currently in compliance in all material respects with all applicable statutes, rules and regulations of the U.S. Food and Drug Administration and applicable foreign regulatory authorities, including the European Medicines Agency and the UK Medicines and Healthcare products Regulatory Agency, including, without limitation, (A) the Federal Food, Drug, and Cosmetic Act (21 U.S.C. §§ 301 et seq.) and the regulations promulgated thereunder; (B) all healthcare related fraud and abuse laws, including, without limitation, the federal Anti-kickback Statute (42 U.S.C. §1320a-7b(b)); the civil False Claims Act (31 U.S.C. §§ 3729 et seq.); the criminal False Claims Law (42 U.S.C. §1320a-7b(a)); the civil monetary penalties law (42 U.S.C. § 1320a-7a); the exclusion law (42 U.S.C. § 1320a-7); the Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h); all criminal laws relating to healthcare fraud and abuse, including, but not limited to 18 U.S.C. Sections 286, 287, 1035, 1347 and 1349; the healthcare fraud criminal provisions under the U.S. Health Insurance Portability and Accountability Act of 1996 ("HIPAA") (42 U.S.C. §§1320d et seq.), the Medicare statute (Title XVIII of the Social Security Act) and the Medicaid statute (Title XIX of the Social Security Act); (C) the patient privacy, data security and breach notification provisions under HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (42 U.S.C. §§17921 et seq.); and (D) licensure, quality, safety and accreditation requirements under applicable federal, state, local or foreign laws or regulatory bodies (collectively, as amended, the "Healthcare Laws"). The Company is not a party to and does not have any ongoing reporting obligations pursuant to any corporate integrity agreement, deferred prosecution agreement, monitoring agreement, consent decree, settlement order, plan of correction or similar agreement with or imposed by any Governmental Entity. Additionally, neither the Company, nor any of its employees, officers, directors or agents, is or has been excluded, suspended, debarred or is otherwise ineligible from participation in any U.S. state or federal healthcare program or human clinical research, or is subject to a governmental inquiry, investigation, proceeding or other similar action that could reasonably be expected to result in such exclusion, suspension or debarment. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, the Company (x) has not received any Form 483, notice of adverse finding, warning letter, untitled letter or other written correspondence, or any other notice from any Governmental Entity alleging or asserting noncompliance with any Healthcare Laws or the terms of any Governmental Licenses; (y) has not received notice of any claim, action, suit, proceeding, hearing, enforcement, investigation or arbitration from any Governmental Entity or third party alleging that any product operation or activity is in violation of any Healthcare Laws or Governmental Licenses and (z) has no knowledge that any such Governmental Entity or third party is considering any such claim, action, suit, proceeding, hearing, enforcement, investigation or arbitration. The Company has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments required by any Healthcare Laws or Governmental Licenses; all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and correct and not misleading on the date filed; and the Company is not aware of any reasonable basis for any material liability with respect thereto. The Company and the Company's officers, employees and agents have not made any untrue statement of material fact or fraudulent statement to any Governmental Entity or failed to disclose a material fact required to be disclosed to any Governmental Entity.

(xxvi) Clinical Data and Regulatory Compliance. All clinical and pre-clinical tests and trials conducted by or on behalf of the Company, including any such studies and trials that are described in or referred to in the Registration Statement, the General Disclosure Package and the Prospectus (the "Company Trials") were and, if still pending, are being conducted in accordance with standard medical and scientific research standards and procedures; current Good Clinical Practices and Good Laboratory Practices; and all applicable laws, rules, and regulations of any applicable regulatory authority, including without limitation the Federal Food, Drug, and Cosmetic Act and the regulations set forth at 21 C.F.R. Parts 50, 54, 56, 58 and 312. The descriptions of the results of the Company Trials contained in the Registration Statement, the General Disclosure Package and the Prospectus are accurate and complete in all material respects and fairly present the data derived therefrom. The Company has no knowledge of any other tests the results of which are inconsistent with or otherwise call into question the results described or referred to in the Registration Statement, the General Disclosure Package and the Prospectus. The Company has not received any written notices or other correspondence from any regulatory authority requiring the termination, suspension or material modification of any preclinical tests or clinical trials.

(xxvii) Accounting Controls. The Company and its subsidiaries, on a consolidated basis, maintain a system of effective internal control over financial reporting (as defined under Rule 13-a15 and 15d-15 under the 1934 Act Regulations) and a system of internal accounting controls each designed to provide reasonable assurances that (A) transactions are executed in accordance with management's general or specific authorization; (B) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain accountability for assets; (C) access to assets is permitted only in accordance with management's general or specific authorization; and (D) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, since the end of the Company's most recent audited fiscal year, there has been (1) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (2) no change in the Company's internal control over financial reporting that has materially affected, or is reasonably likely to materially and adversely affect, the Company's internal control over financial reporting.

(xxviii) Compliance with the Sarbanes-Oxley Act. The Company has taken all necessary actions to ensure that, upon the effectiveness of the Registration Statement, it will be in compliance with all provisions of the Sarbanes-Oxley Act of 2002 and all rules and regulations promulgated thereunder or implementing the provisions thereof (the "Sarbanes-Oxley Act") that are then in effect and with which the Company is required to comply as of the effectiveness of the Registration Statement, and is, or will be, actively taking steps to ensure that it will be in compliance with other provisions of the Sarbanes-Oxley Act not currently in effect, upon the effectiveness of such provisions, or which will become applicable to the Company at all times after the effectiveness of the Registration Statement.

(xxix) Payment of Taxes. All United States federal income tax returns of the Company and its subsidiaries required by law to be filed by them (taking into account any timely requested extensions thereof) have been filed and all taxes shown by such returns or otherwise assessed, which are due and payable, have been paid, except assessments against which appeals have been or will be promptly taken and as to which adequate reserves have been provided. The United States federal income tax returns of the Company through the fiscal year ended December 31, 2018 have been settled and no assessment in connection therewith has been made against the Company. The Company and its subsidiaries have filed all other tax returns that are required to have been filed by them pursuant to applicable foreign, state, local or other law except insofar as the failure to file

such returns would not result in a Material Adverse Effect, and has paid all taxes due pursuant to such returns or pursuant to any assessment received by the Company and its subsidiaries, except for such taxes, if any, as are being contested in good faith and as to which adequate reserves have been established by the Company. The charges, accruals and reserves on the books of the Company in respect of any income and corporation tax liability for any years not finally determined are adequate to meet any assessments or re-assessments for additional income tax for any years not finally determined, except to the extent of any inadequacy that would not result in a Material Adverse Effect.

- (xxx) <u>Insurance</u>. The Company and its subsidiaries carry or are entitled to the benefits of insurance, with financially sound and reputable insurers, in such amounts and covering such risks as is generally maintained by companies of established repute engaged in the same or similar business, and all such insurance is in full force and effect. The Company has no reason to believe that it or any of its subsidiaries will not be able (A) to renew its existing insurance coverage as and when such policies expire or (B) to obtain comparable coverage from similar institutions as may be necessary or appropriate to conduct its business as now conducted and at a cost that would not result in a Material Adverse Effect. Neither of the Company nor any of its subsidiaries has been denied any insurance coverage which it has sought or for which it has applied.
- (xxxi) <u>Investment Company Act</u>. The Company is not required, and upon the issuance and sale of the Securities as herein contemplated and the application of the net proceeds therefrom as described in the Registration Statement, the General Disclosure Package and the Prospectus will not be required, to register as an "investment company" under the Investment Company Act of 1940, as amended (the "1940 Act").
- (xxxii) <u>Absence of Manipulation</u>. Neither the Company nor any affiliate of the Company has taken, nor will the Company or any subsidiary of the Company take, directly or indirectly, any action which is designed, or would reasonably be expected, to cause or result in, or which constitutes, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities or to result in a violation of Regulation M under the 1934 Act.
- (xxxiii) Foreign Corrupt Practices Act. None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or other person acting on behalf of the Company or any of its subsidiaries is aware of or has taken any action, directly or indirectly, that would result in a violation by such persons of the Foreign Corrupt Practices Act of 1977, as amended, and the rules and regulations thereunder (the "FCPA"), including, without limitation, making use of the mails or any means or instrumentality of interstate commerce corruptly in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or other property, gift, promise to give, or authorization of the giving of anything of value to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office, in contravention of the FCPA and the Company and, to the knowledge of the Company, its affiliates have conducted their businesses in compliance with the FCPA and have instituted and maintain policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance therewith.
- (xxxiv) <u>Money Laundering Laws</u>. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder

and any related or similar rules, regulations or guidelines, issued, administered or enforced by any Governmental Entity (collectively, the "Money Laundering Laws"); and no action, suit or proceeding by or before any Governmental Entity involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(xxxv) OFAC. None of the Company, any of its subsidiaries or, to the knowledge of the Company, any director, officer, agent, employee, affiliate or representative of the Company or any of its subsidiaries is an individual or entity ("Person") currently the subject or target of any sanctions administered or enforced by the United States Government, including, without limitation, the U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC"), the United Nations Security Council ("UNSC"), the European Union, Her Majesty's Treasury ("HMT"), or other relevant sanctions authority (collectively, "Sanctions"), nor is the Company located, organized or resident in a country or territory that is the subject of Sanctions; and the Company will not directly or indirectly use the proceeds of the sale of the Securities, or lend, contribute or otherwise make available such proceeds to any subsidiaries, joint venture partners or other Person, to fund or facilitate any activities of or business with any Person, or in any country or territory, that, at the time of such funding or facilitating, is the subject of Sanctions or in any other manner that will result in a violation by any Person (including any Person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions.

(xxxvi) <u>Sales of Reserved Securities</u>. In connection with any offer and sale of Reserved Securities outside the United States, each preliminary prospectus, the Prospectus and any amendment or supplement thereto, at the time it was filed, complied and will comply in all material respects with any applicable laws or regulations of foreign jurisdictions in which the same is distributed. The Company has not offered, or caused the Representatives or Merrill Lynch to offer, Reserved Securities to any person with the specific intent to unlawfully influence (i) a customer or supplier of the Company or any of its affiliates to alter the customer's or supplier's level or type of business with any such entity or (ii) a trade journalist or publication to write or publish favorable information about the Company or any of its affiliates, or their respective businesses or products.

(xxxvii) <u>Lending Relationship</u>. Except as disclosed in the Registration Statement, the General Disclosure Package and the Prospectus, the Company (i) does not have any material lending or other relationship with any bank or lending affiliate of any Underwriter and (ii) does not intend to use any of the proceeds from the sale of the Securities to repay any outstanding debt owed to any affiliate of any Underwriter.

(xxxviii) <u>Statistical and Market-Related Data</u>. Any statistical and market-related data included in the Registration Statement, the General Disclosure Package or the Prospectus are based on or derived from sources that the Company believes, after reasonable inquiry, to be reliable and accurate and, to the extent required, the Company has obtained the written consent to the use of such data from such sources.

(xxxix) <u>Cybersecurity</u>. Except as described in the Registration Statement, the General Disclosure Package and the Prospectus, (A) to the Company's knowledge, there has been no security breach or incident, unauthorized access or disclosure, or other compromise of or relating to the Company or its subsidiaries' information technology assets and equipment and computers, systems, networks, hardware, software, websites, applications, data and databases (including all data and information of their respective customers, employees, suppliers, vendors and any third party data collected, maintained, processed or stored by the Company and its subsidiaries, and any such data collected, maintained, processed or stored by third parties on behalf of the Company and

its subsidiaries), equipment or technology (collectively, "IT Systems and Data"); (B) the Company's IT Systems and Data are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company and its subsidiaries as currently conducted, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants; (C) neither the Company nor its subsidiaries have been notified of, and each of them have no knowledge of any event or condition that could result in, any security breach or incident, unauthorized access or disclosure or other compromise to their IT Systems and Data; (D) the Company and its subsidiaries have implemented and maintained appropriate controls, policies, procedures, and technological safeguards, including backup and disaster recovery technology, to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of their IT Systems and Data reasonably consistent with industry standards and practices or as required by applicable regulatory standards and (E) the Company and its subsidiaries are presently, and have been, in material compliance with all applicable laws and statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of their IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification.

(b) *Officer's Certificates*. Any certificate signed by any officer of the Company or any of its subsidiaries delivered to the Representatives or to counsel for the Underwriters shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

SECTION 2. Sale and Delivery to Underwriters; Closing.

- (a) Initial Securities. On the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company agrees to sell to each Underwriter, severally and not jointly, and each Underwriter, severally and not jointly, agrees to purchase from the Company, at the price per share set forth in Schedule A, that number of Initial Securities set forth in Schedule A opposite the name of such Underwriter, plus any additional number of Initial Securities which such Underwriter may become obligated to purchase pursuant to the provisions of Section 10 hereof, subject, in each case, to such adjustments among the Underwriters as the Representatives in their sole discretion shall make to eliminate any sales or purchases of fractional shares.
- (b) Option Securities. In addition, on the basis of the representations and warranties herein contained and subject to the terms and conditions herein set forth, the Company hereby grant(s) an option to the Underwriters, severally and not jointly, to purchase up to an additional [●] shares of Common Stock, at the price per share set forth in Schedule A, less an amount per share equal to any dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities. The option hereby granted may be exercised for 30 days after the date hereof and may be exercised in whole or in part at any time from time to time upon notice by the Representatives to the Company setting forth the number of Option Securities as to which the several Underwriters are then exercising the option and the time and date of payment and delivery for such Option Securities. Any such time and date of delivery (a "Date of Delivery") shall be determined by the Representatives, but shall not be later than seven full business days after the exercise of said option, nor in any event prior to the Closing Time. If the option is exercised as to all or any portion of the Option Securities, each of the Underwriters, acting severally and not jointly, will purchase that proportion of the total number of Option Securities then being purchased which the number of Initial Securities set forth in Schedule A opposite the name of such Underwriter bears to the total number of Initial Securities, subject, in each case, to such adjustments as the Representatives in their sole discretion shall make to eliminate any sales or purchases of fractional shares.

(c) Payment. Payment of the purchase price for, and delivery of certificates or security entitlements for, the Initial Securities shall be made at the offices of Davis Polk & Wardwell LLP, 1600 El Camino Real, Menlo Park, California 94025, or at such other place as shall be agreed upon by the Representatives and the Company, at 9:00 A.M. (New York City time) on the second (third, if the pricing occurs after 4:30 P.M. (New York City time) on any given day) business day after the date hereof (unless postponed in accordance with the provisions of Section 10), or such other time not later than ten business days after such date as shall be agreed upon by the Representatives and the Company (such time and date of payment and delivery being herein called "Closing Time").

In addition, in the event that any or all of the Option Securities are purchased by the Underwriters, payment of the purchase price for, and delivery of certificates or security entitlements for, such Option Securities shall be made at the above-mentioned offices, or at such other place as shall be agreed upon by the Representatives and the Company, on each Date of Delivery as specified in the notice from the Representatives to the Company.

Payment shall be made to the Company by wire transfer of immediately available funds to a bank account designated by the Company against delivery to the Representatives for the respective accounts of the Underwriters of certificates or security entitlements for the Securities to be purchased by them. It is understood that each Underwriter has authorized the Representatives, for its account, to accept delivery of, receipt for, and make payment of the purchase price for, the Initial Securities and the Option Securities, if any, which it has agreed to purchase. Each Representative, individually and not as representative of the Underwriters, may (but shall not be obligated to) make payment of the purchase price for the Initial Securities or the Option Securities, if any, to be purchased by any Underwriter whose funds have not been received by the Closing Time or the relevant Date of Delivery, as the case may be, but such payment shall not relieve such Underwriter from its obligations hereunder.

SECTION 3. Covenants of the Company. The Company covenants with each Underwriter as follows:

- (a) Compliance with Securities Regulations and Commission Requests. The Company, subject to Section 3(b), will comply with the requirements of Rule 430A, and will notify the Representatives immediately, and confirm the notice in writing, (i) when any post-effective amendment to the Registration Statement shall become effective or any amendment or supplement to the Prospectus shall have been filed, (ii) of the receipt of any comments from the Commission, (iii) of any request by the Commission for any amendment to the Registration Statement or any amendment or supplement to the Prospectus or for additional information, (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment or of any order preventing or suspending the use of any preliminary prospectus or the Prospectus, or of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes or of any examination pursuant to Section 8(d) or 8(e) of the 1933 Act concerning the Registration Statement and (v) if the Company becomes the subject of a proceeding under Section 8A of the 1933 Act in connection with the offering of the Securities. The Company will effect all filings required under Rule 424(b), in the manner and within the time period required by Rule 424(b) (without reliance on Rule 424(b)(8)), and will take such steps as it deems necessary to ascertain promptly whether the form of prospectus transmitted for filing under Rule 424(b) was received for filing by the Commission and, in the event that it was not, it will promptly file such prospectus. The Company will make every reasonable effort to prevent the issuance of any stop order, prevention or suspension and, if any such order is issued, to obtain the lifting thereof at the earliest possible moment.
- (b) Continued Compliance with Securities Laws. The Company will comply with the 1933 Act and the 1933 Act Regulations so as to permit the completion of the distribution of the Securities as

contemplated in this Agreement and in the Registration Statement, the General Disclosure Package and the Prospectus. If at any time when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172 of the 1933 Act Regulations ("Rule 172"), would be) required by the 1933 Act to be delivered in connection with sales of the Securities, any event shall occur or condition shall exist as a result of which it is necessary, in the opinion of counsel for the Underwriters or for the Company, to (i) amend the Registration Statement in order that the Registration Statement will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) amend or supplement the General Disclosure Package or the Prospectus in order that the General Disclosure Package or the Prospectus, as the case may be, will not include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein not misleading in the light of the circumstances existing at the time it is delivered to a purchaser or (iii) amend the Registration Statement or amend or supplement the General Disclosure Package or the Prospectus, as the case may be, in order to comply with the requirements of the 1933 Act or the 1933 Act Regulations, the Company will promptly (A) give the Representatives notice of such event, (B) prepare any amendment or supplement as may be necessary to correct such statement or omission or to make the Registration Statement, the General Disclosure Package or the Prospectus comply with such requirements and, a reasonable amount of time prior to any proposed filing or use, furnish the Representatives with copies of any such amendment or supplement and (C) file with the Commission any such amendment or supplement; provided that the Company shall not file or use any such amendment or supplement to which the Representatives or counsel for the Underwriters s

- (c) Delivery of Registration Statements. The Company has furnished or will deliver to the Representatives and counsel for the Underwriters, without charge, conformed copies of the Registration Statement as originally filed and each amendment thereto (including exhibits filed therewith) and of all consents and certificates of experts. The copies of the Registration Statement and each amendment thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.
- (d) Delivery of Prospectuses. The Company has delivered to each Underwriter, without charge, as many copies of each preliminary prospectus as such Underwriter reasonably requested, and the Company hereby consents to the use of such copies for purposes permitted by the 1933 Act. The Company will furnish to each Underwriter, without charge, during the period when a prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, such number of copies of the Prospectus (as amended or supplemented) as such Underwriter may reasonably request. The Prospectus and any amendments or supplements thereto furnished to the Underwriters will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.
- (e) Blue Sky Qualifications. The Company will use its reasonable best efforts, in cooperation with the Underwriters, to qualify the Securities for offering and sale under the applicable securities laws of such states and other jurisdictions (domestic or foreign) as the Representatives may designate and to maintain such qualifications in effect so long as required to complete the distribution of the Securities; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.
- (f) *Rule 158.* The Company will timely file such reports pursuant to the Securities Exchange Act of 1934, as amended (the "1934 Act") as are necessary in order to make generally available to its securityholders as soon as practicable an earnings statement for the purposes of, and to provide to the Underwriters the benefits contemplated by, the last paragraph of Section 11(a) of the 1933 Act.

- (g) *Use of Proceeds*. The Company will use the net proceeds received by it from the sale of the Securities in the manner specified in the Registration Statement, the General Disclosure Package and the Prospectus under "Use of Proceeds."
- (h) Listing. The Company will use its reasonable best efforts to effect and maintain the listing of the Common Stock (including the Securities) on the Nasdaq Global Market.
- Restriction on Sale of Securities, During a period of 180 days from the date of the Prospectus, the Company will not, without the prior written consent of [●], (i) directly or indirectly, offer, pledge, 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 any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or file or confidentially submit any registration statement under the 1933 Act with respect to any of the foregoing or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the Common Stock, whether any such swap or transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash or otherwise. The foregoing sentence shall not apply to (A) the Securities to be sold hereunder, (B) any shares of Common Stock issued by the Company upon the exercise (including any net exercise or exercise by delivery of already-owned shares of Common Stock) of an option or warrant or the conversion of a security outstanding on the date hereof and referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (C) any shares of Common Stock issued or options to purchase Common Stock or restricted stock units covering shares of Common Stock granted pursuant to existing employee benefit plans of the Company referred to in the Registration Statement, the General Disclosure Package and the Prospectus, (D) any shares of Common Stock issued or options to purchase Common Stock granted pursuant to any non-employee director stock plan referred to in the Registration Statement, the General Disclosure Package and the Prospectus; (E) the filing by the Company of any registration statement on Form S-8 or a successor form thereto with respect to the registration of securities to be offered under any employee benefit or equity incentive plan referred to in the Registration Statement, the General Disclosure Package and the Prospectus and (F) shares of Common Stock or other securities issued in connection with a transaction that includes a commercial relationship (including strategic alliances, commercial lending relationships, joint ventures, and strategic acquisitions), provided that (i) the aggregate number of shares issued pursuant to this clause (F) shall not exceed 5.0% of the total number of outstanding shares of Common Stock immediately following the issuance and sale of the Securities and (ii) the recipient of any such shares of Common Stock or securities issued pursuant to this clause (F) during the 180-day restricted period shall enter into an agreement substantially in the form of Exhibit A hereto.
- (j) If, in the sole discretion of [●], [●] agree to release or waive the restrictions set forth in a lock-up agreement described in Section 5(i) hereof for an officer or director of the Company and provide the Company with notice of the impending release or waiver at least three business days before the effective date of the release or waiver, the Company agrees to announce the impending release or waiver by a press release substantially in the form of Exhibit C hereto through a major news service at least two business days before the effective date of the release or waiver.
- (k) Reporting Requirements. The Company, during the period when a Prospectus relating to the Securities is (or, but for the exception afforded by Rule 172, would be) required to be delivered under the 1933 Act, will file all documents required to be filed with the Commission pursuant to the 1934 Act within the time periods required by the 1934 Act and 1934 Act Regulations. Additionally, the Company shall report the use of proceeds from the issuance of the Shares as may be required under Rule 463 under the 1933 Act.

- (l) Issuer Free Writing Prospectuses. The Company agrees that, unless it obtains the prior written consent of the Representatives, it will not make any offer relating to the Securities that would constitute an Issuer Free Writing Prospectus or that would otherwise constitute a "free writing prospectus," or a portion thereof, required to be filed by the Company with the Commission or retained by the Company under Rule 433; provided that the Representatives will be deemed to have consented to the Issuer Free Writing Prospectuses listed on Schedule B-2 hereto and any "road show that is a written communication" within the meaning of Rule 433(d)(8)(i) that has been reviewed by the Representatives. The Company represents that it has treated or agrees that it will treat each such free writing prospectus consented to, or deemed consented to, by the Representatives as an "issuer free writing prospectus," as defined in Rule 433, and that it has complied and will comply with the applicable requirements of Rule 433 with respect thereto, including timely filing with the Commission where required, legending and record keeping. If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement, any preliminary prospectus or the Prospectus or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.
- (m) *Certification Regarding Beneficial Owners*. The Company will deliver to the Representatives, on the date of execution of this Agreement, a properly completed and executed Certification Regarding Beneficial Owners of Legal Entity Customers, together with copies of identifying documentation, and the Company undertakes to provide such additional supporting documentation as the Representatives may reasonably request in connection with the verification of the foregoing certification.
- (o) Compliance with FINRA Rules. The Company hereby agrees that it will ensure that the Reserved Securities will be restricted as required by FINRA or the FINRA rules from sale, transfer, assignment, pledge or hypothecation for a period of three months following the date of this Agreement. Merrill Lynch will notify the Company as to which persons will need to be so restricted. At the request of the Underwriters or Merrill Lynch, the Company will direct the transfer agent to place a stop transfer restriction upon such securities for such period of time. Should the Company release, or seek to release, from such restrictions any of the Reserved Securities, the Company agrees to reimburse the Underwriters and Merrill Lynch for any reasonable expenses (including, without limitation, legal expenses) they incur in connection with such release.
- (p) Testing-the-Waters Materials. If at any time following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at that subsequent time, not misleading, the Company will promptly notify the Representatives and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.
- (q) *Emerging Growth Company Status*. The Company will promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (i) completion of the distribution of the Securities within the meaning of the Securities Act and (ii) completion of the 180-day restricted period referred to in Section 3(i).

SECTION 4. Payment of Expenses.

- Expenses. The Company will pay or cause to be paid all expenses incident to the performance of its obligations under this Agreement (excluding taxes, other than taxes described in clause (iii) below), including (i) the preparation, printing and filing of the Registration Statement (including financial statements and exhibits) as originally filed and each amendment thereto, (ii) the preparation, printing and delivery to the Underwriters of copies of each preliminary prospectus, each Issuer Free Writing Prospectus and the Prospectus and any amendments or supplements thereto and reasonable costs associated with electronic delivery of any of the foregoing by the Underwriters to investors, (iii) the preparation, issuance and delivery of the certificates or security entitlements for the Securities to the Underwriters, including any stock or other transfer taxes and any stamp or other similar taxes, in each case payable upon the sale, issuance or delivery of the Securities to the Underwriters in the manner contemplated by this Agreement and the Prospectus, (iv) the fees and disbursements of the Company's counsel, accountants and other advisors, (v) the qualification of the Securities under securities laws in accordance with the provisions of Section 3(e) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection therewith and in connection with the preparation of the Blue Sky Survey and any supplement thereto, (vi) the fees and expenses of any transfer agent or registrar for the Securities, (vii) the costs and expenses of the Company relating to investor presentations on any "road show" undertaken in connection with the marketing of the Securities, including without limitation, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged by the Company or with the Company's prior written consent in connection with the road show presentations, travel and lodging expenses of the representatives and officers of the Company and any such consultants (provided that the travel, lodging and any car travel expenses of representatives of the Underwriters shall be paid for by the Underwriters), and fifty percent (50%) of the cost of any aircraft chartered in connection with the road show (with the Underwriters agreeing to pay for the other fifty percent (50%) of the cost of the aircraft, as well as any other travel and lodging expenses of the Underwriters in connection with the road show), (viii) the filing fees incident to, and the reasonable fees and disbursements of counsel to the Underwriters in connection with, the review by FINRA of the terms of the sale of the Securities, (ix) the fees and expenses incurred in connection with the listing of the Securities on the Nasdaq Global Market and (x) the costs and expenses (including, without limitation, any damages or other amounts payable in connection with legal or contractual liability) associated with the reforming of any contracts for sale of the Securities made by the Underwriters caused by a breach of the representation contained in the third sentence of Section 1(a)(ii) and (xi) all reasonable costs and expenses of the Underwriters and Merrill Lynch, including the reasonable fees and disbursements of counsel for the Underwriters and Merrill Lynch, in connection with matters related to the Reserved Securities which are designated by the Company for sale to Invitees; provided, however, that the amount of fees and disbursements of counsel payable by the Company pursuant to clauses (v), (viii) and (xi) shall not exceed \$50,000 in the aggregate.
- (b) *Termination of Agreement*. If this Agreement is terminated by the Representatives in accordance with the provisions of Section 5, Section 9(a)(i) or (iii) or Section 10 hereof, the Company shall reimburse the non-defaulting Underwriters for all of their reasonable out-of-pocket expenses, including the reasonable fees and disbursements of counsel for the Underwriters.

SECTION 5. <u>Conditions of Underwriters' Obligations</u>. The obligations of the several Underwriters hereunder are subject to the accuracy of the representations and warranties of the Company contained herein or in certificates of any officer of the Company or any of its subsidiaries delivered pursuant to the provisions hereof, to the performance by the Company of its covenants and other obligations hereunder, and to the following further conditions:

- (a) Effectiveness of Registration Statement; Rule 430A Information. The Registration Statement, including any Rule 462(b) Registration Statement, has become effective and, at the Closing Time, no stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto has been issued under the 1933 Act, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to the Company's knowledge, contemplated; and the Company has complied with each request (if any) from the Commission for additional information. A prospectus containing the Rule 430A Information shall have been filed with the Commission in the manner and within the time frame required by Rule 424(b) without reliance on Rule 424(b)(8) or a post-effective amendment providing such information shall have been filed with, and declared effective by, the Commission in accordance with the requirements of Rule 430A.
- (b) Opinions and Negative Assurance Letter of Counsel for Company. At the Closing Time, the Representatives shall have received the favorable opinion and negative assurance letter, dated the Closing Time, of Cooley LLP, counsel for the Company, and an opinion, dated the Closing Time, of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., intellectual property counsel for the Company ("Mintz Levin"), each in form and substance as previously agreed upon by the Representatives and such counsel, together with signed or reproduced copies of such letters for each of the other Underwriters.
- (c) *Opinion of Counsel for Underwriters*. At the Closing Time, the Representatives shall have received the favorable opinion, dated the Closing Time, of Davis Polk and Wardwell LLP, counsel for the Underwriters, together with signed or reproduced copies of such letter for each of the other Underwriters.
- (d) Officers' Certificate. At the Closing Time, there shall not have been, since the date hereof or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, and the Representatives shall have received a certificate of the Chief Executive Officer or the President of the Company and of the chief financial or chief accounting officer of the Company, dated the Closing Time, to the effect that (i) there has been no such material adverse change, (ii) the representations and warranties of the Company in this Agreement are true and correct with the same force and effect as though expressly made at and as of the Closing Time, (iii) the Company has complied with all agreements and satisfied all conditions on its part to be performed or satisfied at or prior to the Closing Time, and (iv) no stop order suspending the effectiveness of the Registration Statement under the 1933 Act has been issued, no order preventing or suspending the use of any preliminary prospectus or the Prospectus has been issued and no proceedings for any of those purposes have been instituted or are pending or, to their knowledge, contemplated.
- (e) Accountant's Comfort Letter. At the time of the execution of this Agreement, the Representatives shall have received from Ernst & Young LLP, independent public accountants ("Ernst & Young"), a letter, dated such date, in form and substance satisfactory to the Representatives, together with signed or reproduced copies of such letter for each of the other Underwriters containing statements and information of the type ordinarily included in accountants' "comfort letters" to underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the General Disclosure Package and the Prospectus.
- (f) *CFO Certificate*. At the Closing Time, the Company shall have furnished to the Representatives a certificate, dated the Closing Time and addressed to the Underwriters, of the Company's chief financial officer, on behalf of the Company and not in his individual capacity, with respect to certain financial data, contained in the Registration Statement (or any amendment thereto), the General Disclosure Package or the Prospectus (or any amendment or supplement thereto), providing "management comfort" with respect to such information, in form and substance reasonably satisfactory to the Representatives.

- (g) *Bring-down Comfort Letter*. At the Closing Time, the Representatives shall have received from Ernst & Young a letter, dated as of the Closing Time, to the effect that they reaffirm the statements made in the letter furnished pursuant to subsection (e) of this Section, except that the specified date referred to shall be a date not more than three business days prior to the Closing Time.
- (h) Approval of Listing. At the Closing Time, the Securities shall have been approved for listing on the Nasdaq Global Market, subject only to official notice of issuance.
- (i) *No Objection.* FINRA has confirmed that it has not raised any objection with respect to the fairness and reasonableness of the underwriting terms and arrangements relating to the offering of the Securities.
- (j) *Lock-up Agreements*. At the date of this Agreement, the Representatives shall have received an agreement substantially in the form of Exhibit B hereto signed by the persons listed on Schedule C hereto.
- (k) Absence of Rated Securities. Neither the Company nor its subsidiaries have any debt securities or preferred stock that are rated by any "nationally recognized statistical rating agency" (as defined in Section 3(a)(62) of the 1934 Act).
- (l) Conditions to Purchase of Option Securities. In the event that the Underwriters exercise their option provided in Section 2(b) hereof to purchase all or any portion of the Option Securities, the representations and warranties of the Company contained herein and the statements in any certificates furnished by the Company and any of its subsidiaries hereunder shall be true and correct as of each Date of Delivery and, at the relevant Date of Delivery, the Representatives shall have received:
 - (i) Officers' Certificate. A certificate, dated such Date of Delivery, of the President or a Vice President of the Company and of the chief financial or chief accounting officer of the Company confirming that the certificate delivered at the Closing Time pursuant to Section 5(d) hereof remains true and correct as of such Date of Delivery.
 - (ii) <u>Opinions of Counsels for Company</u>. If requested by the Representatives, the favorable opinion and negative assurance letter of Cooley LLP, counsel for the Company, together with the opinion of Mintz Levin, each in form and substance as previously agreed upon by the Representatives and such counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(b) hereof.
 - (iii) Opinion of Counsel for Underwriters. If requested by the Representatives, the favorable opinion of Davis Polk & Wardwell LLP, counsel for the Underwriters, dated such Date of Delivery, relating to the Option Securities to be purchased on such Date of Delivery and otherwise to the same effect as the opinion required by Section 5(c) hereof.
 - (v) <u>Bring-down Comfort Letter</u>. If requested by the Representatives, a letter from Ernst & Young, in form and substance satisfactory to the Representatives and dated such Date of Delivery, substantially in the same form and substance as the letter furnished to the Representatives pursuant to Section 5(e) hereof, except that the "specified date" in the letter furnished pursuant to this paragraph shall be a date not more than three business days prior to such Date of Delivery.

- (vi) A certificate, dated such Date of Delivery, of the chief financial officer of the Company confirming that the certificate delivered at the Closing Time pursuant to Section 5(f) hereof remains true and correct as of such Date of Delivery.
- (m) Additional Documents. At the Closing Time and at each Date of Delivery (if any) counsel for the Underwriters shall have been furnished with such documents and opinions as they may reasonably require for the purpose of enabling them to pass upon the issuance and sale of the Securities as herein contemplated, or in order to evidence the accuracy of any of the representations or warranties, or the fulfillment of any of the conditions, herein contained; and all proceedings taken by the Company in connection with the issuance and sale of the Securities as herein contemplated shall be reasonably satisfactory in form and substance to the Representatives and counsel for the Underwriters.
- (n) *Termination of Agreement*. If any condition specified in this Section shall not have been fulfilled when and as required to be fulfilled, this Agreement, or, in the case of any condition to the purchase of Option Securities on a Date of Delivery which is after the Closing Time, the obligations of the several Underwriters to purchase the relevant Option Securities, may be terminated by the Representatives by notice to the Company at any time at or prior to Closing Time or such Date of Delivery, as the case may be, and such termination shall be without liability of any party to any other party except as provided in Section 4 and except that Sections 1, 6, 7, 8, 14, 15, 16 and 17 shall survive any such termination and remain in full force and effect.

SECTION 6. Indemnification.

- (a) *Indemnification of Underwriters*. The Company agrees to indemnify and hold harmless each Underwriter, its affiliates (as such term is defined in Rule 501(b) under the 1933 Act (each, an "Affiliate")), its selling agents and each person, if any, who controls any Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act as follows:
 - (i) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, arising out of any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto), including the Rule 430A Information, or the omission or alleged omission therefrom of a material fact required to be stated therein or necessary to make the statements therein not misleading or arising out of any untrue statement or alleged untrue statement of a material fact included (A) in any preliminary prospectus, any Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto), or (B) in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Securities ("Marketing Materials"), including any roadshow or investor presentations made to investors by the Company (whether in person or electronically), or the omission or alleged omission in any preliminary prospectus, Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication, Prospectus or in any Marketing Materials of a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading;
 - (ii) against any and all loss, liability, claim, damage and expense whatsoever, as incurred, to the extent of the aggregate amount paid in settlement of any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or of any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission; provided that (subject to Section 6(d) below) any such settlement is effected with the written consent of the Company;

(iii) against any and all expense whatsoever, as incurred (including the fees and disbursements of counsel chosen by the Representatives), reasonably incurred in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue statement or omission, or any such alleged untrue statement or omission, to the extent that any such expense is not paid under (i) or (ii) above;

provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in the Registration Statement (or any amendment thereto), including the Rule 430A Information, the General Disclosure Package, any preliminary prospectus, any Issuer Free Writing Prospectus, any Written Testing-the-Waters Communication, any Marketing Materials or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.

- (b) Indemnification of Company, Directors and Officers. Each Underwriter severally agrees to indemnify and hold harmless the Company, its directors, each of its officers who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act, against any and all loss, liability, claim, damage and expense described in the indemnity contained in subsection (a) of this Section, as incurred, but only with respect to untrue statements or omissions, or alleged untrue statements or omissions, made in the Registration Statement (or any amendment thereto), including the Rule 430A Information, the General Disclosure Package or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information.
- Actions against Parties; Notification. Each indemnified party shall give notice as promptly as reasonably practicable to each indemnifying party of any action commenced against it in respect of which indemnity may be sought hereunder, but failure to so notify an indemnifying party shall not relieve such indemnifying party from any liability hereunder to the extent it is not materially prejudiced as a result thereof and in any event shall not relieve it from any liability which it may have otherwise than on account of this indemnity agreement. In the case of parties indemnified pursuant to Section 6(a) above, counsel to the indemnified parties shall be selected by the Representatives, and, in the case of parties indemnified pursuant to Section 6(b) above, counsel to the indemnified parties shall be selected by the Company. An indemnifying party may participate at its own expense in the defense of any such action; provided, however, that counsel to the indemnifying party shall not (except with the consent of the indemnified party) also be counsel to the indemnified party. In no event shall the indemnifying parties be liable for fees and expenses of more than one counsel (in addition to any local counsel) separate from their own counsel for all indemnified parties in connection with any one action or separate but similar or related actions in the same jurisdiction arising out of the same general allegations or circumstances. No indemnifying party shall, without the prior written consent of the indemnified parties, settle or compromise or consent to the entry of any judgment with respect to any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever in respect of which indemnification or contribution could be sought under this Section 6 or Section 7 hereof (whether or not the indemnified parties are actual or potential parties thereto), unless such settlement, compromise or consent (i) includes an unconditional release of each indemnified party from all liability arising out of such litigation, investigation, proceeding or claim and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act by or on behalf of any indemnified party.
- (d) Settlement without Consent if Failure to Reimburse. If at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel, such indemnifying party agrees that it shall be liable for any settlement of the nature contemplated by Section 6(a)(ii) or settlement of any claim in connection with any violation referred to in Section 6(e)

effected without its written consent if (i) such settlement is entered into more than 45 days after receipt by such indemnifying party of the aforesaid request, (ii) such indemnifying party shall have received notice of the terms of such settlement at least 30 days prior to such settlement being entered into and (iii) such indemnifying party shall not have reimbursed such indemnified party in accordance with such request prior to the date of such settlement.

Indemnification for Reserved Securities. In connection with the offer and sale of the Reserved Securities, the Company agrees to indemnify and hold harmless the Underwriters, their Affiliates (including Merrill Lynch) and selling agents and each person, if any, who controls any Underwriter or Merrill Lynch within the meaning of either Section 15 of the 1933 Act or Section 20 of the 1934 Act, from and against any and all loss, liability, claim, damage and expense (including, without limitation, any reasonable legal or other expenses reasonably incurred in connection with defending, investigating or settling any such action or claim), as incurred, (i) arising out of the violation of any applicable laws or regulations of foreign jurisdictions where Reserved Securities have been offered, (ii) arising out of any untrue statement or alleged untrue statement of a material fact contained in any other material prepared by or with the consent of the Company for distribution to Invitees in connection with the offering of the Reserved Securities or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, (iii) caused by the failure of any Invitee to pay for and accept delivery of Reserved Securities which have been orally confirmed for purchase by any Invitee by 9:00 A.M. (New York City time) on the first business day after the date of the Agreement or (iv) related to, or arising out of or in connection with, the offering of the Reserved Securities; provided, however, that this indemnity agreement shall not apply to any loss, liability, claim, damage or expense to the extent arising out of any untrue statement or omission or alleged untrue statement or omission made in the Registration Statement (or any amendment thereto), including the Rule 430A Information, the General Disclosure Package, any preliminary prospectus, Issuer Free Writing Prospectus, Written Testing-the-Waters Communication, Marketing Materials or the Prospectus (or any amendment or supplement thereto) in reliance upon and in conformity with the Underwriter Information; provided further that no indemnification shall be available under this section for any loss, liability, claim, damage or expense which shall have been finally judicially determined by a court of competent jurisdiction to have been caused primarily by the gross negligence or willful misconduct of the Representatives.

SECTION 7. <u>Contribution</u>. If the indemnification provided for in Section 6 hereof is for any reason unavailable to or insufficient to hold harmless an indemnified party in respect of any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate amount of such losses, liabilities, claims, damages and expenses incurred by such indemnified party, as incurred, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, from the offering of the Securities pursuant to this Agreement or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company, on the one hand, and of the Underwriters, on the other hand, in connection with the statements or omissions, or in connection with any violation of the nature referred to in Section 6(e) hereof, which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations.

The relative benefits received by the Company, on the one hand, and the Underwriters, on the other hand, in connection with the offering of the Securities pursuant to this Agreement shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Securities pursuant to this Agreement (after deducting underwriting discounts and commissions but before deducting expenses) received by the Company, on the one hand, and the total underwriting discount received by the Underwriters, on the other hand, in each case as set forth on the cover of the Prospectus, bear to the aggregate initial public offering price of the Securities as set forth on the cover of the Prospectus.

The relative fault of the Company, on the one hand, and the Underwriters, on the other hand, shall be determined by reference to, among other things, whether any such untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact relates to information supplied by the Company or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission or any violation of the nature referred to in Section 6(e) hereof.

The Company and the Underwriters agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above in this Section 7. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above in this Section 7 shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission.

Notwithstanding the provisions of this Section 7, no Underwriter shall be required to contribute any amount in excess of the underwriting commissions received by such Underwriter in connection with the Shares underwritten by it and distributed to the public.

No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

For purposes of this Section 7, each person, if any, who controls an Underwriter within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act and each Underwriter's Affiliates and selling agents shall have the same rights to contribution as such Underwriter, and each director of the Company, each officer of the Company who signed the Registration Statement, and each person, if any, who controls the Company within the meaning of Section 15 of the 1933 Act or Section 20 of the 1934 Act shall have the same rights to contribution as the Company. The Underwriters' respective obligations to contribute pursuant to this Section 7 are several in proportion to the number of Initial Securities set forth opposite their respective names in Schedule A hereto and not joint.

SECTION 8. <u>Representations, Warranties and Agreements to Survive</u>. All representations, warranties and agreements contained in this Agreement or in certificates of officers of the Company or any of its subsidiaries submitted pursuant hereto, shall remain operative and in full force and effect regardless of (i) any investigation made by or on behalf of any Underwriter or its Affiliates or selling agents, any person controlling any Underwriter, its officers or directors or any person controlling the Company and (ii) delivery of and payment for the Securities.

SECTION 9. Termination of Agreement.

(a) *Termination*. The Representatives may terminate this Agreement, by notice to the Company, at any time at or prior to the Closing Time (i) if there has been, in the judgment of the Representatives, since the time of execution of this Agreement or since the respective dates as of which information is given in the Registration Statement, the General Disclosure Package or the Prospectus, any material adverse change in the condition, financial or otherwise, or in the earnings, business affairs or business prospects of the Company and its subsidiaries considered as one enterprise, whether or not arising in the ordinary course of business, or (ii) if there has occurred any material adverse change in the financial markets in the United States or the international financial markets, any outbreak of hostilities or escalation

thereof or other calamity or crisis or any change or development involving a prospective change in national or international political, financial or economic conditions, in each case the effect of which is such as to make it, in the judgment of the Representatives, impracticable or inadvisable to proceed with the completion of the offering or to enforce contracts for the sale of the Securities, or (iii) if trading in any securities of the Company has been suspended or materially limited by the Commission or the Nasdaq Global Market, or (iv) if trading generally on the NYSE MKT or the New York Stock Exchange or in the Nasdaq Global Market has been suspended or materially limited, or minimum or maximum prices for trading have been fixed, or maximum ranges for prices have been required, by any of said exchanges or by order of the Commission, FINRA or any other Governmental Entity, or (v) a material disruption has occurred in commercial banking or securities settlement or clearance services in the United States or with respect to Clearstream or Euroclear systems in Europe, or (vi) if a banking moratorium has been declared by either Federal or New York authorities.

- (b) *Liabilities*. If this Agreement is terminated pursuant to this Section, such termination shall be without liability of any party to any other party except as provided in Section 4 hereof, and provided further that Sections 1, 6, 7, 8, 14, 15 16 and 17 shall survive such termination and remain in full force and effect.
- SECTION 10. <u>Default by One or More of the Underwriters</u>. If one or more of the Underwriters shall fail at the Closing Time or a Date of Delivery to purchase the Securities which it or they are obligated to purchase under this Agreement (the "Defaulted Securities"), the Representatives shall have the right, within 24 hours thereafter, to make arrangements for one or more of the non-defaulting Underwriters, or any other underwriters, to purchase all, but not less than all, of the Defaulted Securities in such amounts as may be agreed upon and upon the terms herein set forth; if, however, the Representatives shall not have completed such arrangements within such 24-hour period, then:
 - (i) if the number of Defaulted Securities does not exceed 10% of the number of Securities to be purchased on such date, each of the non-defaulting Underwriters shall be obligated, severally and not jointly, to purchase the full amount thereof in the proportions that their respective underwriting obligations hereunder bear to the underwriting obligations of all non-defaulting Underwriters, or
 - (ii) if the number of Defaulted Securities exceeds 10% of the number of Securities to be purchased on such date, this Agreement or, with respect to any Date of Delivery which occurs after the Closing Time, the obligation of the Underwriters to purchase, and the Company to sell, the Option Securities to be purchased and sold on such Date of Delivery shall terminate without liability on the part of any non-defaulting Underwriter.

No action taken pursuant to this Section shall relieve any defaulting Underwriter from liability in respect of its default.

In the event of any such default which does not result in a termination of this Agreement or, in the case of a Date of Delivery which is after the Closing Time, which does not result in a termination of the obligation of the Underwriters to purchase and the Company to sell the relevant Option Securities, as the case may be, either the (i) Representatives or (ii) the Company shall have the right to postpone Closing Time or the relevant Date of Delivery, as the case may be, for a period not exceeding seven days in order to effect any required changes in the Registration Statement, the General Disclosure Package or the Prospectus or in any other documents or arrangements. As used herein, the term "Underwriter" includes any person substituted for an Underwriter under this Section 10.

SECTION 11. Notices. All notices and other communications hereunder shall be in writing and shall be deemed to have been duly given if mailed or transmitted by any standard form of telecommunication. Notices to the Underwriters shall be directed to the Representatives at BofAS at One Bryant Park, New York, New York 10036, attention of Syndicate Department (facsimile: (646) 855-3073), with a copy to ECM Legal (facsimile: (212) 230-8730); the Representatives at Wells Fargo Securities, LLC at 375 Park Avenue, New York, New York 10152, attention of Equity Syndicate Department (facsimile: (212) 214-5198); the Representatives at BMO Capital Markets Corp. at 3 Times Squre, New York, NY 10036, attention of Legal Department (facsimile: (212) 702-1205) and the Representatives at UBS Securities LLC at 1285 Avenue of the Americas, New York, New York 10019, attention of Syndicate (facsimile: (212) 713-3371). Notices to the Company shall be directed to it at 561 Eccles Avenue, South San Francisco, California 94080, attention of Chief Financial Officer.

SECTION 12. No Advisory or Fiduciary Relationship. The Company acknowledges and agrees that (a) the purchase and sale of the Securities pursuant to this Agreement, including the determination of the initial public offering price of the Securities and any related discounts and commissions, is an arm's-length commercial transaction between the Company, on the one hand, and the several Underwriters, on the other hand, (b) in connection with the offering of the Securities and the process leading thereto, each Underwriter is and has been acting solely as a principal and is not the agent or fiduciary of the Company, any of its subsidiaries or their respective stockholders, creditors, employees or any other party, (c) no Underwriter has assumed or will assume an advisory or fiduciary responsibility in favor of the Company with respect to the offering of the Securities or the process leading thereto (irrespective of whether such Underwriter has advised or is currently advising the Company or any of its subsidiaries on other matters) and no Underwriter has any obligation to the Company with respect to the offering of the Securities except the obligations expressly set forth in this Agreement, (d) the Underwriters and their respective affiliates may be engaged in a broad range of transactions that involve interests that differ from those of the Company and (e) the Underwriters have not provided any legal, accounting, regulatory or tax advice with respect to the offering of the Securities and the Company has consulted its own respective legal, accounting, regulatory and tax advisors to the extent it deemed appropriate.

SECTION 13. Recognition of the U.S. Special Resolution Regimes.

- (a) In the event that any Underwriter that is a Covered Entity becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from such Underwriter of this Agreement, and any interest and obligation in or under this Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.
- (b) In the event that any Underwriter that is a Covered Entity or a BHC Act Affiliate of such Underwriter becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement that may be exercised against such Underwriter are permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement were governed by the laws of the United States or a state of the United States.

For purposes of this Section 13, a "BHC Act Affiliate" has the meaning assigned to the term "affiliate" in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k). "Covered Entity" means any of the following: (i) a "covered entity" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b); (ii) a "covered bank" as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b). "Default Right" has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable. "U.S. Special Resolution Regime" means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

SECTION 14. Parties. This Agreement shall each inure to the benefit of and be binding upon the Underwriters and the Company and their respective successors. Nothing expressed or mentioned in this Agreement is intended or shall be construed to give any person, firm or corporation, other than the Underwriters and the Company and their respective successors and the controlling persons and officers and directors referred to in Sections 6 and 7 and their heirs and legal representatives, any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision herein contained. This Agreement and all conditions and provisions hereof are intended to be for the sole and exclusive benefit of the Underwriters and the Company and their respective successors, and said controlling persons and officers and directors and their heirs and legal representatives, and for the benefit of no other person, firm or corporation. No purchaser of Securities from any Underwriter shall be deemed to be a successor by reason merely of such purchase.

SECTION 15. <u>Trial by Jury</u>. The Company (on its behalf and, to the extent permitted by applicable law, on behalf of its stockholders and affiliates) and each of the Underwriters hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

SECTION 16. GOVERNING LAW. THIS AGREEMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF, THE STATE OF NEW YORK WITHOUT REGARD TO ITS CHOICE OF LAW PROVISIONS.

SECTION 17. Consent to Jurisdiction; Waiver of Immunity. Any legal suit, action or proceeding arising out of or based upon this Agreement or the transactions contemplated hereby ("Related Proceedings") shall be instituted in (i) the federal courts of the United States of America located in the City and County of New York, Borough of Manhattan or (ii) the courts of the State of New York located in the City and County of New York, Borough of Manhattan (collectively, the "Specified Courts"), and each party irrevocably submits to the exclusive jurisdiction (except for proceedings instituted in regard to the enforcement of a judgment of any such court (a "Related Judgment"), as to which such jurisdiction is non-exclusive) of such courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail to such party's address set forth above shall be effective service of process for any suit, action or other proceeding brought in any such court. The parties irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the Specified Courts and irrevocably and unconditionally waive and agree not to plead or claim in any such court that any such suit, action or other proceeding brought in any such court has been brought in an inconvenient forum.

SECTION 18. TIME. TIME SHALL BE OF THE ESSENCE OF THIS AGREEMENT. EXCEPT AS OTHERWISE SET FORTH HEREIN, SPECIFIED TIMES OF DAY REFER TO NEW YORK CITY TIME.

SECTION 19. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all such counterparts shall together constitute one and the same Agreement.

SECTION 20. Effect of Headings. The Section headings herein are for convenience only and shall not affect the construction hereof.

its terms.	
	Very truly yours,
	RAPT Therapeutics, Inc.
	By Title:
	Titte.
CONFIRMED AND ACCEPTED, as of the date first above written:	
BOFA SECURITIES, INC. WELLS FARGO SECURITIES, LLC BMO CAPITAL MARKETS CORP. UBS SECURITIES LLC	
By: BOFA SECURITIES, INC.	
Ву	
By Authorized Signatory	
By: WELLS FARGO SECURITIES, LLC	
Ву	
Authorized Signatory	
By: BMO CAPITAL MARKETS CORP.	
Ву	
ByAuthorized Signatory	
By: UBS SECURITIES LLC	

If the foregoing is in accordance with your understanding of our agreement, please sign and return to the Company a counterpart hereof, whereupon this instrument, along with all counterparts, will become a binding agreement among the Underwriters and the Company in accordance with

For themselves and as Representatives of the other Underwriters named in Schedule A hereto.

Authorized Signatory

SCHEDULE A

The initial public offering price per share for the Securities shall be \$[●].

The purchase price per share for the Securities to be paid by the several Underwriters shall be $\{\bullet\}$, being an amount equal to the initial public offering price set forth above less $\{\bullet\}$ per share, subject to adjustment in accordance with Section 2(b) for dividends or distributions declared by the Company and payable on the Initial Securities but not payable on the Option Securities.

Name of Underwriter Init	itial Securities
BofA Securities, Inc.	
Wells Fargo Securities, LLC	
BMO Capital Markets Corp.	
UBS Securities LLC	
Total	[•]

Sch A-1

SCHEDULE B-1

Pricing Terms

- 1. The Company is selling $[\bullet]$ shares of Common Stock.
- 2. The Company has granted an option to the Underwriters, severally and not jointly, to purchase up to an additional [•] shares of Common Stock.
- 3. The initial public offering price per share for the Securities shall be $\P[\bullet]$.

SCHEDULE B-2

Free Writing Prospectuses

[SPECIFY EACH ISSUER GENERAL USE FREE WRITING PROSPECTUS]

Sch B - 1

SCHEDULE C

List of Persons and Entities Subject to Lock-up

Sch C - 1

FORM OF OPINIONS OF COMPANY'S COUNSEL TO BE DELIVERED PURSUANT TO SECTION 5(b)

A-1

FORM OF LOCK-UP FROM DIRECTORS, OFFICERS OR OTHER STOCKHOLDERS PURSUANT TO SECTION 5(I)

 $[\bullet], 2019$

BofA Securities, Inc.
Wells Fargo Securities, LLC
BMO Capital Markets Corp.
UBS Securities LLC
as Representatives of the several
Underwriters to be named in the
within-mentioned Underwriting Agreement

c/o BofA Securities, Inc.

One Bryant Park New York, New York 10036

c/o Wells Fargo Securities, LLC

375 Park Avenue New York, New York 10152

c/o BMO Capital Markets Corp.

3 Times Square, 25th Floor New York, New York 10036

c/o UBS Securities LLC

1285 Avenue of the Americas New York, New York 10019

Re: <u>Proposed Public Offering by RAPT Therapeutics, Inc.</u>

Dear Sirs:

The undersigned, a stockholder [and an officer and/or director] of RAPT Therapeutics, Inc., a Delaware corporation (the "Company"), understands that BofA Securities, Inc., Wells Fargo Securities, LLC, BMO Capital Markets Corp. and UBS Securities LLC (collectively, the "Representatives") propose to enter into an Underwriting Agreement (the "Underwriting Agreement") with the Company providing for the public offering of shares of the Company's common stock, par value \$0.0001 per share (the "Common Stock") (such offering, the "Public Offering"). In recognition of the benefit that the Public Offering will confer upon the undersigned as a stockholder [and an officer and/or director] of the Company, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned agrees with each underwriter to be named in the Underwriting Agreement that, during the period beginning on the date hereof and ending on the date that is 180 days from the date of the Underwriting Agreement (the "Lock-Up Period"), the undersigned will not, without the prior written consent of the Representatives, (i) directly or indirectly, offer, pledge, 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 any shares of the Company's Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock, whether now owned or hereafter acquired by the undersigned or with respect to which the undersigned has or hereafter acquires the power of disposition (collectively, the "Lock-Up Securities"), or exercise any right with respect to the registration of any of the Lock-Up Securities, or file, cause to be filed or cause to be confidentially submitted any registration statement in connection therewith, under the Securities Act of 1933, as amended, or (ii) enter into any swap or any other agreement or any transaction that transfers, in whole or i

indirectly, the economic consequence of ownership of the Lock-Up Securities, whether any such swap or transaction is to be settled by delivery of Common Stock or other securities, in cash or otherwise. If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing provisions shall be equally applicable to any issuer-directed Common Stock the undersigned may purchase in the Public Offering.

If the undersigned is an officer or director of the Company, (1) the Representatives agree that, at least three business days before the effective date of any release or waiver of the foregoing restrictions in connection with a transfer of shares of the Common Stock, the Representatives will notify the Company of the impending release or waiver, and (2) the Company has agreed, or will agree, in the Underwriting Agreement to announce the impending release or waiver by press release through a major news service at least two business days before the effective date of the release or waiver. Any release or waiver granted by the Representatives hereunder to any such officer or director shall only be effective two business days after the publication date of such press release. The provisions of this paragraph will not apply if (i) the release or waiver is effected solely to permit a transfer not for consideration and (ii) the transferee has agreed in writing to be bound by the same terms described in this lock-up agreement to the extent and for the duration that such terms remain in effect at the time of the transfer.

Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer the Lock-Up Securities (or for (d) below, convert) without the prior written consent of the Representatives:

(a) provided that (1) the Representatives receive a signed lock-up agreement for the balance of the Lock-Up Period from each donee, trustee, distributee, or transferee, as the case may be, (2) any such transfer shall not involve a disposition for value, (3) such transfers are not required to be reported with the Securities and Exchange Commission on Form 4 in accordance with Section 16 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and (4) the undersigned does not otherwise voluntarily effect any public filing or report regarding such transfers during the Lock-Up Period:

- (i) as a bona fide gift or gifts;
- (ii) by will or intestate succession upon the death of the undersigned, including to the transferee's nominee or custodian;
- (iii) to the immediate family of the undersigned or any trust, partnership or similar entity for the direct or indirect benefit of the undersigned or the immediate family of the undersigned (for purposes of this lock-up agreement, "immediate family" shall mean any relationship by blood, marriage or adoption, not more remote than first cousin) or if the undersigned is a trust, to any beneficiary of the undersigned (including such beneficiary's estate);
- (iv) as a distribution to limited partners or stockholders of the undersigned; or
- (v) to the undersigned's affiliates or to any investment fund or other entity controlled or managed by the undersigned.

(b) to the Company upon exercise of any right in respect of any option granted under any incentive plan of the Company described in the final prospectus relating to the Public Offering including the surrender of shares of Common Stock to the Company in "net" or "cashless" exercise of any option; provided that (1) the shares of Common Stock received by the undersigned upon exercise continue to be subject to the restrictions on transfer set forth in this lock-up agreement, and (2) if required, any public report or filing under Section 16 of the Exchange Act shall clearly indicate in the footnotes thereto that the filing relates to the exercise of a stock option, that no shares were sold by the reporting person and that the shares received upon exercise of the stock option are subject to a lock-up agreement with the underwriters;

- (c) to the Company in connection with the repurchase by the Company from the undersigned of shares of Common Stock or other securities pursuant to a repurchase right arising upon the termination of the undersigned's employment with the Company; provided that such repurchase right is pursuant to contractual agreements with the Company; provided further that any filing required by Section 16 of the Exchange Act shall clearly indicate in the footnotes thereto that the such transfer is being made pursuant to the circumstances described in this clause (c) and provided further that no other public announcement or filing shall be required or shall be voluntarily made during the Lock-Up Period;
- (d) the Lock-Up Securities which are shares of preferred stock of the Company into shares of Common Stock of the Company, provided that any shares of Common Stock received upon such conversion remain subject to the terms of this lock-up agreement; or
- (e) pursuant to an order of a court of competent jurisdiction or in connection with a qualified domestic order or divorce settlement; provided that each transferee agrees in writing to be bound by the terms of this lock-up agreement prior to such transfer; and provided further, that any filing required by Section 16 of the Exchange Act shall clearly indicate in the footnotes thereto that the such transfer is being made pursuant to the circumstances described in this clause (e).

Furthermore, during the Lock-Up Period, the undersigned may sell shares of Common Stock of the Company purchased by the undersigned in the Public Offering or on the open market following the Public Offering if and only if (i) such sales are not required to be reported in any public report or filing with the Securities and Exchange Commission, or otherwise and (ii) the undersigned does not otherwise voluntarily effect any public filing or report regarding such sales during the Lock-Up Period.

Nothing herein shall prevent the undersigned from establishing a 10b5-1 trading plan that complies with Rule 10b5-1 under the Exchange Act ("10b5-1 trading plan") so long as each such plan does not permit sales of Lock-Up Securities during the Lock-Up Period; and provided that the establishment of a 10b5-1 trading plan or the amendment of a 10b5-1 trading plan shall only be permitted if (i) the establishment of such plan is not required to be reported in any public report or filing with the SEC, or otherwise and (ii) the undersigned does not otherwise voluntarily effect any public filing or report regarding the establishment of such plan during the Lock-Up Period.

The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the Lock-Up Securities except in compliance with the foregoing restrictions.

The undersigned hereby agrees that, to the extent that the restrictions on transfer set forth in this lock-up agreement conflict with or are in any way inconsistent with any investor rights agreement, any market standoff agreement, stock option agreement, stock purchase agreement, or any other lock-up agreement related to the Common Stock to which the undersigned and the Company may be party, this lock-up agreement shall control.

Notwithstanding anything to the contrary contained herein, this lock-up agreement will automatically terminate and the undersigned will be released from all of his, her or its obligations hereunder upon the earliest to occur, if any, of (i) the date the Company advises the Representatives in writing, that it has determined not to proceed with the Public Offering, (ii) the date the Company files an application with the Securities and Exchange Commission to withdraw the registration statement related to the Public Offering, (iii) the date the Underwriting Agreement is terminated prior to payment for and delivery of the

shares of Common Stock to be sold thereunder or (iv) October 31, 2019, in the event that the Underwriting Agreement has not been executed by such date (provided, that the Company may by written notice to the undersigned prior to such date extend such date for a period of up to an additional six months).

[Signature page follows]

IF AN INDIVIDUAL:	IF AN ENTITY:	
By:(duly authorized signature)	(please print complete name of entity)	
Name:(please print full name)	By:(duly authorized signature)	
	Name:(please print full name)	
Address:	Address:	

Very truly yours,

[Signature Page to Lock-Up Agreement]

Exhibit C

FORM OF PRESS RELEASE TO BE ISSUED PURSUANT TO SECTION 3(j)

C-1

CERTIFICATE OF AMENDMENT TO THE AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF RAPT THERAPEUTICS, INC.

RAPT THERAPEUTICS, INC., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), hereby certifies that:

FIRST: The name of the Corporation is RAPT Therapeutics, Inc.

SECOND: The date on which the Certificate of Incorporation of the Corporation was originally filed with the Secretary of State of the State of Delaware is March 4, 2015 and the original name of this Corporation was FLX Bio, Inc.

THIRD: Pursuant to Sections 141 and 242 of the Delaware General Corporation Law (the "*DGCL*"), this Certificate of Amendment to the Amended and Restated Certificate of Incorporation (the "*Certificate of Amendment*") amends Article IV(A) of the Amended and Restated Certificate of Incorporation of the Corporation to read in its entirety as follows:

"A. <u>Authorization of Stock</u>. This corporation is authorized to issue two classes of stock to be designated, respectively, common stock and preferred stock. The total number of shares that this corporation is authorized to issue is 250,960,482. The total number of shares of common stock authorized to be issued is 133,071,007, par value \$0.0001 per share (the "<u>Common Stock</u>"). The total number of shares of preferred stock authorized to be issued is 117,889,475, par value \$0.0001 per share (the "<u>Preferred Stock</u>"), of which 29,271,007 shares are designated as "Series C-2 Preferred Stock," 26,109,363 shares are designated as "Series C Preferred Stock," 25,000,000 shares are designated as "Series B Preferred Stock" and 37,509,105 shares are designated as "Series A Preferred Stock". Effective when this Certificate of Amendment is filed with the Secretary of State of the State of Delaware, each six (6) outstanding shares of Common Stock shall, automatically and without any action on the part of the respective holders thereof, be combined and converted into one (1) share of Common Stock; provided, however, that the Company shall issue no fractional shares as a result of the actions set forth herein but shall instead pay to the holder, on a series by series basis, of such fractional share a sum in cash equal to such fraction multiplied by the fair market value of one share of Common Stock on the day before the date this Certificate of Amendment is filed with the Secretary of State of the State of Delaware."

FOURTH: This Certificate of Amendment has been duly adopted in accordance with Sections 228 and 242 of the DGCL, with the approval of the Corporation's stockholders having been given by written consent without a meeting in accordance with Section 228 of the DGCL. The undersigned affirms, under penalties of perjury, that this Certificate of Amendment is the act and deed of the Corporation and that the facts stated herein are true.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its Chief Executive Officer this 19th day of July, 2019.

RAPT THERAPEUTICS, INC.

/s/ Brian Wong

Brian Wong, Chief Executive Officer

AMENDED AND RESTATED BYLAWS

OF

RAPT THERAPEUTICS, INC. (A DELAWARE CORPORATION)

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AMENDED AND RESTATED BYLAWS

OF

RAPT THERAPEUTICS, INC. (A DELAWARE CORPORATION)

ARTICLE I

OFFICES

- **Section 1. Registered Office.** The registered office of the corporation in the State of Delaware shall be in the City of Wilmington, County of New Castle.
- **Section 2. Other Offices.** The corporation shall also have and maintain an office or principal place of business at such place as may be fixed by the Board of Directors, and may also have offices at such other places, both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II

CORPORATE SEAL

Section 3. Corporate Seal. The Board of Directors may adopt a corporate seal. The corporate seal shall consist of a die bearing the name of the corporation and the inscription, "Corporate Seal-Delaware." Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS' MEETINGS

Section 4. Place Of Meetings. Meetings of the stockholders of the corporation may be held at such place, either within or without the State of Delaware, as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as provided under the Delaware General Corporation Law ("**DGCL**").

Section 5. Annual Meetings.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may properly come before it, shall be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation's notice of meeting of stockholders (with respect to business other than nominations); (ii) brought specifically by or at the direction of the Board of Directors; or (iii) by any stockholder of the corporation who was a stockholder of record at the time of giving the stockholder's notice provided for in Section 5(b) below, who is entitled to vote at the meeting and who complied with the notice procedures set forth in Section 5. For the avoidance of doubt, clause (iii) above shall be the exclusive means for a

stockholder to make nominations and submit other business (other than matters properly included in the corporation's notice of meeting of stockholders and proxy statement under Rule 14a-8 under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (the "1934 Act")) before an annual meeting of stockholders.

- **(b)** At an annual meeting of the stockholders, only such business shall be conducted as is a proper matter for stockholder action under Delaware law and as shall have been properly brought before the meeting.
- (i) For nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(iii) and must update and supplement such written notice on a timely basis as set forth in Section 5(c). Such stockholder's notice shall set forth: (A) as to each nominee such stockholder proposes to nominate at the meeting: (1) the name, age, business address and residence address of such nominee, (2) the principal occupation or employment of such nominee, (3) the class and number of shares of each class of capital stock of the corporation which are owned of record and beneficially by such nominee, (4) the date or dates on which such shares were acquired and the investment intent of such acquisition, (5) a statement whether such nominee, if elected, intends to tender, promptly following such person's failure to receive the required vote for election or re-election at the next meeting at which such person would face election or re-election, an irrevocable resignation effective upon acceptance of such resignation by the Board of Directors, and (6) such other information concerning such nominee as would be required to be disclosed in a proxy statement soliciting proxies for the election of such nominee as a director in an election contest (even if an election contest is not involved), or that is otherwise required to be disclosed pursuant to Section 14 of the 1934 Act and the rules and regulations promulgated thereunder (including such person's written consent to being named as a nominee and to serving as a director if elected); and (B) the information required by Section 5(b)(iv). The corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as an independent d
- (ii) Other than proposals sought to be included in the corporation's proxy materials pursuant to Rule 14(a)-8 under the 1934 Act, for business other than nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(iii), and must update and supplement such written notice on a timely basis as set forth in Section 5(c). Such stockholder's notice shall set forth: (A) as to each matter such stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, and any material interest (including any anticipated benefit of such business to any Proponent (as defined below) other than solely as a result of its ownership of the corporation's capital stock, that is material to any Proponent individually, or to the Proponents in the aggregate) in such business of any Proponent; and (B) the information required by Section 5(b)(iv).
- (iii) To be timely, the written notice required by Section 5(b)(i) or 5(b)(ii) must be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the first anniversary of the preceding year's annual meeting; *provided*, *however*, that, subject to the last sentence of this Section 5(b)(iii), in the event that the date of the annual meeting is advanced more than thirty (30) days prior to or delayed by more than thirty (30) days after the

anniversary of the preceding year's annual meeting, notice by the stockholder to be timely must be so received not earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made. In no event shall an adjournment or a postponement of an annual meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period for the giving of a stockholder's notice as described above.

(iv) The written notice required by Section 5(b)(i) or 5(b)(ii) shall also set forth, as of the date of the notice and as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (each, a "Proponent" and collectively, the "Proponents"): (A) the name and address of each Proponent, as they appear on the corporation's books; (B) the class, series and number of shares of the corporation that are owned beneficially and of record by each Proponent; (C) a description of any agreement, arrangement or understanding (whether oral or in writing) with respect to such nomination or proposal between or among any Proponent and any of its affiliates or associates, and any others (including their names) acting in concert, or otherwise under the agreement, arrangement or understanding, with any of the foregoing; (D) a representation that the Proponents are holders of record or beneficial owners, as the case may be, of shares of the corporation entitled to vote at the meeting and intend to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice (with respect to a notice under Section 5(b)(ii)) or to propose the business that is specified in the notice (with respect to a notice under Section 5(b)(ii)); (E) a representation as to whether the Proponents intend to deliver a proxy statement and form of proxy to holders of a sufficient number of holders of the corporation's voting shares to elect such nominee or nominees (with respect to a notice under Section 5(b)(ii)); (F) to the extent known by any Proponent, the name and address of any other stockholder supporting the proposal on the date of such stockholder's notice; and (G) a description of all Derivative Transactions (as defined below) by each Proponent during the previous twelve (12) month period, including the date of the transactions and the class, series and number of securities involved in, and the material economic terms of, such Derivative Transactions.

For purposes of Sections 5 and 6, a "*Derivative Transaction*" means any agreement, arrangement, interest or understanding entered into by, or on behalf or for the benefit of, any Proponent or any of its affiliates or associates, whether record or beneficial:

- (w) the value of which is derived in whole or in part from the value of any class or series of shares or other securities of the corporation,
- (x) which otherwise provides any direct or indirect opportunity to gain or share in any gain derived from a change in the value of securities of the corporation,
- (y) the effect or intent of which is to mitigate loss, manage risk or benefit of security value or price changes, or
- (z) which provides the right to vote or increase or decrease the voting power of, such Proponent, or any of its affiliates or associates, with respect to any securities of the corporation,

which agreement, arrangement, interest or understanding may include, without limitation, any option, warrant, debt position, note, bond, convertible security, swap, stock appreciation right, short position, profit interest, hedge, right to dividends, voting agreement, performance-related fee or arrangement to borrow or lend shares (whether or not subject to payment, settlement, exercise or conversion in any such class or series), and any proportionate interest of such Proponent in the securities of the corporation held by any general or limited partnership, or any limited liability company, of which such Proponent is, directly or indirectly, a general partner or managing member.

- (c) A stockholder providing written notice required by Section 5(b)(i) or (ii) shall update and supplement such notice in writing, if necessary, so that the information provided or required to be provided in such notice is true and correct in all material respects as of (i) the record date for the meeting and (ii) the date that is five (5) business days prior to the meeting and, in the event of any adjournment or postponement thereof, five (5) business days prior to such adjourned or postponed meeting. In the case of an update and supplement pursuant to clause (i) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than five (5) business days after the record date for the meeting. In the case of an update and supplement pursuant to clause (ii) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than two (2) business days prior to the date for the meeting, and, in the event of any adjournment or postponement thereof, two (2) business days prior to such adjourned or postponed meeting.
- (d) Notwithstanding anything in Section 5(b)(iii) to the contrary, in the event that the number of directors in an Expiring Class is increased and there is no public announcement of the appointment of a director to such class, or, if no appointment was made, of the vacancy in such class, made by the corporation at least ten (10) days before the last day a stockholder may deliver a notice of nomination in accordance with Section 5(b)(iii), a stockholder's notice required by this Section 5 and which complies with the requirements in Section 5(b)(ii), other than the timing requirements in Section 5(b)(iii), shall also be considered timely, but only with respect to nominees for any new positions in such Expiring Class created by such increase, if it shall be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the corporation. For purposes of this section, an "Expiring Class" shall mean a class of directors whose term shall expire at the next annual meeting of stockholders.
- **(e)** A person shall not be eligible for election or re-election as a director unless the person is nominated either in accordance with clause (ii) of Section 5(a), or in accordance with clause (iii) of Section 5(a). Except as otherwise required by law, the chairperson of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, or the Proponent does not act in accordance with the representations in Sections 5(b)(iv)(D) and 5(b)(iv)(E), to declare that such proposal or nomination shall not be presented for stockholder action at the meeting and shall be disregarded, notwithstanding that proxies in respect of such nominations or such business may have been solicited or received.
- **(f)** Notwithstanding the foregoing provisions of this Section 5, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholders' meeting, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided, however*, that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to proposals and/or nominations to be considered pursuant to Section 5(a)(iii) of these Bylaws.
 - **(g)** For purposes of Sections 5 and 6,

- (i) "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the 1934 Act; and
- (ii) "affiliates" and "associates" shall have the meanings set forth in Rule 405 under the Securities Act of 1933, as amended (the "1933 Act").

Section 6. Special Meetings.

- (a) Special meetings of the stockholders of the corporation may be called, for any purpose as is a proper matter for stockholder action under Delaware law, by (i) the Chairperson of the Board of Directors, (ii) the Chief Executive Officer, or (iii) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption).
- **(b)** The Board of Directors shall determine the time and place, if any, of such special meeting. Upon determination of the time and place, if any, of the meeting, the Secretary shall cause a notice of meeting to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. No business may be transacted at such special meeting otherwise than specified in the notice of meeting.
- (c) Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected (i) by or at the direction of the Board of Directors or (ii) by any stockholder of the corporation who is a stockholder of record at the time of giving notice provided for in this paragraph, who shall be entitled to vote at the meeting and who delivers written notice to the Secretary of the corporation setting forth the information required by Section 5(b)(i). In the event the corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder of record may nominate a person or persons (as the case may be), for election to such position(s) as specified in the corporation's notice of meeting, if written notice setting forth the information required by Section 5(b)(i) of these Bylaws shall be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the later of the ninetieth (90th) day prior to such meeting or the tenth (10th) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. The stockholder shall also update and supplement such information as required under Section 5(c). In no event shall an adjournment or a postponement of a special meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period for the giving of a stockholder's notice as described above.
- (d) Notwithstanding the foregoing provisions of this Section 6, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder with respect to matters set forth in this Section 6. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided, however,* that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to nominations for the election to the Board of Directors to be considered pursuant to Section 6(c) of these Bylaws.

Section 7. Notice Of Meetings. Except as otherwise provided by law, notice, given in writing or by electronic transmission, of each meeting of stockholders shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting, such notice to specify the place, if any, date and hour, in the case of special meetings, the purpose or purposes of the meeting, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at any such meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. Notice of the time, place, if any, and purpose of any meeting of stockholders may be waived in writing, signed by the person entitled to notice thereof, or by electronic transmission by such person, either before or after such meeting, and will be waived by any stockholder by his attendance thereat in person, by remote communication, if applicable, or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting shall be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 8. Quorum. At all meetings of stockholders, except where otherwise provided by statute or by the Certificate of Incorporation, or by these Bylaws, the presence, in person, by remote communication, if applicable, or by proxy duly authorized, of the holders of a majority of the outstanding shares of stock entitled to vote shall constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairperson of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business shall be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum. Except as otherwise provided by statute or by applicable stock exchange rules, or by the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the affirmative vote of the majority of shares present in person, by remote communication, if applicable, or represented by proxy at the meeting and entitled to vote generally on the subject matter shall be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors shall be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy at the meeting and entitled to vote generally on the election of directors. Where a separate vote by a class or classes or series is required, except where otherwise provided by the statute or by the Certificate of Incorporation or these Bylaws, a majority of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy duly authorized, shall constitute a quorum entitled to take action with respect to that vote on that matter. Except where otherwise provided by statute or by the Certificate of Incorporation or these Bylaws, the affirmative vote of the majority (plurality, in the case of the election of directors) of shares of such class or classes or series present in person, by remote communication, if applicable, or represented by proxy at the meeting shall be the act of such class or classes or series.

Section 9. Adjournment And Notice Of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairperson of the meeting or by the vote of a majority of the shares present in person, by remote communication, if applicable, or represented by proxy at the meeting. When a meeting is adjourned to another time or place, if any, notice need not be given of the adjourned meeting if the time and place, if any, thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

- **Section 10. Voting Rights.** For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders, except as otherwise provided by law, only persons in whose names shares stand on the stock records of the corporation on the record date, as provided in Section 12 of these Bylaws, shall be entitled to vote at any meeting of stockholders. Every person entitled to vote shall have the right to do so either in person, by remote communication, if applicable, or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy shall be voted after three (3) years from its date of creation unless the proxy provides for a longer period.
- **Section 11. Joint Owners Of Stock.** If shares or other securities having voting power stand of record in the names of two (2) or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two (2) or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting shall have the following effect: (a) if only one (1) votes, his act binds all; (b) if more than one (1) votes, the act of the majority so voting binds all; (c) if more than one (1) votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in the DGCL, Section 217(b). If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of subsection (c) shall be a majority or even-split in interest.
- **Section 12. List of Stockholders.** The Secretary shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. The list shall be open to examination of any stockholder during the time of the meeting as provided by law.
- **Section 13. Action Without Meeting.** No action shall be taken by the stockholders except at an annual or special meeting of stockholders called in accordance with these Bylaws, and no action shall be taken by the stockholders by written consent or by electronic transmission.

Section 14. Organization.

- (a) At every meeting of stockholders, the Chairperson of the Board of Directors, or, if a Chairperson has not been appointed or is absent, the Chief Executive Officer, or if no Chief Executive Officer is then serving or is absent, the President, or, if the President is absent, a chairperson of the meeting chosen by a majority in interest of the stockholders entitled to vote, present in person or by proxy, shall act as chairperson. The Chairperson of the Board may appoint the Chief Executive Officer as chairperson of the meeting. The Secretary, or, in his or her absence, an Assistant Secretary or other officer or other person directed to do so by the chairperson of the meeting, shall act as secretary of the meeting.
- **(b)** The Board of Directors of the corporation shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairperson of the

meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairperson, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairperson shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters which are to be voted on by ballot. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting. Unless and to the extent determined by the Board of Directors or the chairperson of the meeting, meetings of stockholders shall not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV

DIRECTORS

Section 15. Number And Term Of Office. The authorized number of directors of the corporation shall be fixed in accordance with the Certificate of Incorporation. Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors shall not have been elected at an annual meeting, they may be elected as soon thereafter as convenient at a special meeting of the stockholders called for that purpose in the manner provided in these Bylaws.

Section 16. Powers. The powers of the corporation shall be exercised, its business conducted and its property controlled by the Board of Directors, except as may be otherwise provided by statute or by the Certificate of Incorporation.

Section 17. Classes of Directors. Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, following the closing of the initial public offering pursuant to an effective registration statement under the 1933 Act, covering the offer and sale of Common Stock of the corporation to the public (the "*Initial Public Offering*"), the directors shall be divided into three classes designated as Class I, Class II and Class III, respectively. The Board of Directors is authorized to assign members of the Board of Directors already in office to such classes at the time the classification becomes effective. At the first annual meeting of stockholders following the closing of the Initial Public Offering, the term of office of the Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following the Initial Public Offering, the term of office of the Class III directors shall be elected for a full term of three years. At the third annual meeting of stockholders following the Initial Public Offering, the term of office of the Class III directors shall be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting.

Notwithstanding the foregoing provisions of this Section 17, each director shall serve until his successor is duly elected and qualified or until his earlier death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Section 18. Vacancies. Unless otherwise provided in the Certificate of Incorporation, and subject to the rights of the holders of any series of Preferred Stock or as otherwise provided by applicable law, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal

or other causes and any newly created directorships resulting from any increase in the number of directors shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, or by a sole remaining director, and not by the stockholders, *provided*, *however*, that whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the Certificate of Incorporation, vacancies and newly created directorships of such class or classes or series shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor shall have been elected and qualified. A vacancy in the Board of Directors shall be deemed to exist under this Bylaw in the case of the death, removal or resignation of any director.

Section 19. Resignation. Any director may resign at any time by delivering his or her notice in writing or by electronic transmission to the Secretary, such resignation to specify whether it will be effective at a particular time. If no such specification is made, the Secretary, in his or her discretion, may either (a) require confirmation from the director prior to deeming the resignation effective, in which case the resignation will be deemed effective upon receipt of such confirmation, or (b) deem the resignation effective at the time of delivery of the resignation to the Secretary. When one or more directors shall resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each Director so chosen shall hold office for the unexpired portion of the term of the Director whose place shall be vacated and until his successor shall have been duly elected and qualified.

Section 20. Removal.

- (a) Subject to the rights of holders of any series of Preferred Stock to elect additional directors under specified circumstances, neither the Board of Directors nor any individual director may be removed without cause.
- **(b)** Subject to any limitation imposed by law, any individual director or directors may be removed with cause by the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of all then outstanding shares of capital stock of the corporation entitled to vote generally at an election of directors, voting together as a single class.

Section 21. Meetings.

- (a) Regular Meetings. Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware which has been designated by the Board of Directors and publicized among all directors, either orally or in writing, by telephone, including a voice-messaging system or other system designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means. No further notice shall be required for regular meetings of the Board of Directors.
- **(b) Special Meetings.** Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chairperson of the Board, the Chief Executive Officer or a majority of the total number of authorized directors.

- **(c) Meetings by Electronic Communications Equipment.** Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.
- (d) Notice of Special Meetings. Notice of the time and place of all special meetings of the Board of Directors shall be orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means, during normal business hours, at least twenty-four (24) hours before the date and time of the meeting. If notice is sent by US mail, it shall be sent by first class mail, charges prepaid, at least three (3) days before the date of the meeting. Notice of any meeting may be waived in writing, or by electronic transmission, at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.
- **(e) Waiver of Notice.** The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, shall be as valid as though it had been transacted at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present who did not receive notice shall sign a written waiver of notice or shall waive notice by electronic transmission. All such waivers shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 22. Quorum And Voting.

- (a) Unless the Certificate of Incorporation requires a greater number, and except with respect to questions related to indemnification arising under Section 45 for which a quorum shall be one-third of the exact number of directors fixed from time to time, a quorum of the Board of Directors shall consist of a majority of the exact number of directors fixed from time to time by the Board of Directors in accordance with the Certificate of Incorporation; *provided*, *however*, at any meeting whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting.
- **(b)** At each meeting of the Board of Directors at which a quorum is present, all questions and business shall be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by law, the Certificate of Incorporation or these Bylaws.
- **Section 23. Action Without Meeting.** Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing or writings or transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 24. Fees And Compensation. Directors shall be entitled to such compensation for their services as may be approved by the Board of Directors, including, if so approved, by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors. Nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

Section 25. Committees.

- (a) Executive Committee. The Board of Directors may appoint an Executive Committee to consist of one (1) or more members of the Board of Directors. The Executive Committee, to the extent permitted by law and provided in the resolution of the Board of Directors shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any Bylaw of the corporation.
- **(b)** Other Committees. The Board of Directors may, from time to time, appoint such other committees as may be permitted by law. Such other committees appointed by the Board of Directors shall consist of one (1) or more members of the Board of Directors and shall have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event shall any such committee have the powers denied to the Executive Committee in these Bylaws.
- **(c) Term.** The Board of Directors, subject to any requirements of any outstanding series of Preferred Stock and the provisions of subsections (a) or (b) of this Section 25, may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member shall terminate on the date of his death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.
- (d) Meetings. Unless the Board of Directors shall otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section 25 shall be held at such times and places as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at any place which has been determined from time to time by such committee, and may be called by any Director who is a member of such committee, upon notice to the members of such committee of the time and place of such special meeting given in the manner provided for the giving of notice to members of the Board of Directors of the time and place of special meetings of the Board of Directors. Notice of any special meeting of any committee may be waived in writing or by electronic transmission at any time before or after the meeting and will be waived by any director by attendance thereat, except when the

director attends such special meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Unless otherwise provided by the Board of Directors in the resolutions authorizing the creation of the committee, a majority of the authorized number of members of any such committee shall constitute a quorum for the transaction of business, and the act of a majority of those present at any meeting at which a quorum is present shall be the act of such committee.

- **Section 26. Duties of Chairperson of the Board of Directors.** The Chairperson of the Board of Directors, if appointed and when present, shall preside at all meetings of the stockholders and the Board of Directors. The Chairperson of the Board of Directors shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.
- **Section 27. Organization.** At every meeting of the directors, the Chairperson of the Board of Directors, or, if a Chairperson has not been appointed or is absent, the Chief Executive Officer (if a director), or, if a Chief Executive Officer is absent, the President (if a director), or if the President is absent, the most senior Vice President (if a director), or, in the absence of any such person, a chairperson of the meeting chosen by a majority of the directors present, shall preside over the meeting. The Secretary, or in his absence, any Assistant Secretary or other officer, director or other person directed to do so by the person presiding over the meeting, shall act as secretary of the meeting.

ARTICLE V

OFFICERS

Section 28. Officers Designated. The officers of the corporation shall include, if and when designated by the Board of Directors, the Chief Executive Officer, the President, one or more Vice Presidents, the Secretary, the Chief Financial Officer and the Treasurer. The Board of Directors may also appoint one or more Assistant Secretaries and Assistant Treasurers and such other officers and agents with such powers and duties as it shall deem necessary. The Board of Directors may assign such additional titles to one or more of the officers as it shall deem appropriate. Any one person may hold any number of offices of the corporation at any one time unless specifically prohibited therefrom by law. The salaries and other compensation of the officers of the corporation shall be fixed by or in the manner designated by the Board of Directors.

Section 29. Tenure And Duties Of Officers.

- (a) General. All officers shall hold office at the pleasure of the Board of Directors and until their successors shall have been duly elected and qualified, unless sooner removed. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors.
- **(b) Duties of Chief Executive Officer.** The Chief Executive Officer shall preside at all meetings of the stockholders and at all meetings of the Board of Directors (if a director), unless the Chairperson of the Board of Directors has been appointed and is present. Unless an officer has been appointed Chief Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. To the extent that a Chief Executive Officer has been appointed and no President has been appointed, all references in these Bylaws to the President shall be deemed references to the Chief Executive Officer. The Chief Executive Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

- **(c) Duties of President.** The President shall preside at all meetings of the stockholders and at all meetings of the Board of Directors (if a director), unless the Chairperson of the Board of Directors or the Chief Executive Officer has been appointed and is present. Unless another officer has been appointed Chief Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The President shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.
- **(d) Duties of Vice Presidents.** A Vice President may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant. A Vice President shall perform other duties commonly incident to their office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or, if the Chief Executive Officer has not been appointed or is absent, the President shall designate from time to time.
- **(e) Duties of Secretary.** The Secretary shall attend all meetings of the stockholders and of the Board of Directors and shall record all acts and proceedings thereof in the minute book of the corporation. The Secretary shall give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary shall perform all other duties provided for in these Bylaws and other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time. The Chief Executive Officer, or if no Chief Executive Officer is then serving, the President may direct any Assistant Secretary or other officer to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time.
- (f) Duties of Chief Financial Officer. The Chief Financial Officer shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President. The Chief Financial Officer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Chief Financial Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time. To the extent that a Chief Financial Officer has been appointed and no Treasurer has been appointed, all references in these Bylaws to the Treasurer shall be deemed references to the Chief Financial Officer. The President may direct the Treasurer, if any, or any Assistant Treasurer, or the controller or any assistant controller to assume and perform the duties of the Chief Financial Officer in the absence or disability of the Chief Financial Officer, and each Treasurer and Assistant Treasurer and each controller and assistant controller shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time.

- **(g) Duties of Treasurer.** Unless another officer has been appointed Chief Financial Officer of the corporation, the Treasurer shall be the chief financial officer of the corporation and shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President, and, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Treasurer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President and Chief Financial Officer (if not Treasurer) shall designate from time to time.
- **Section 30. Delegation Of Authority.** The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.
- **Section 31. Resignations.** Any officer may resign at any time by giving notice in writing or by electronic transmission to the Board of Directors or to the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President or to the Secretary. Any such resignation shall be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation shall become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.
- **Section 32. Removal.** Any officer may be removed from office at any time, either with or without cause, by the affirmative vote of a majority of the directors in office at the time, or by the unanimous written consent of the directors in office at the time, or by any committee or by the Chief Executive Officer or by other superior officers upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 33. Execution Of Corporate Instruments. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name without limitation, or to enter into contracts on behalf of the corporation, except where otherwise provided by law or these Bylaws, and such execution or signature shall be binding upon the corporation.

All checks and drafts drawn on banks or other depositaries on funds to the credit of the corporation or in special accounts of the corporation shall be signed by such person or persons as the Board of Directors shall authorize so to do.

Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 34. Voting Of Securities Owned By The Corporation. All stock and other securities of other corporations owned or held by the corporation for itself, or for other parties in any capacity, shall be voted, and all proxies with respect thereto shall be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairperson of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII

SHARES OF STOCK

Section 35. Form And Execution Of Certificates. The shares of the corporation shall be represented by certificates, or shall be uncertificated if so provided by resolution or resolutions of the Board of Directors. Certificates for the shares of stock, if any, shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock in the corporation represented by certificate shall be entitled to have a certificate signed by or in the name of the corporation by the Chairperson of the Board of Directors, or the President or any Vice President and by the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by him in the corporation. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he were such officer, transfer agent, or registrar at the date of issue.

Section 36. Lost Certificates. A new certificate or certificates shall be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner's legal representative, to agree to indemnify the corporation in such manner as it shall require or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

Section 37. Transfers.

- (a) Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by attorney duly authorized, and, in the case of stock represented by certificate, upon the surrender of a properly endorsed certificate or certificates for a like number of shares.
- **(b)** The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

Section 38. Fixing Record Dates.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, subject to applicable law, not be more

than sixty (60) nor less than ten (10) days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided*, *however*, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty (60) days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 39. Registered Stockholders. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 40. Execution Of Other Securities. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Section 36), may be signed by the Chairperson of the Board of Directors, the President or any Vice President, or such other person as may be authorized by the Board of Directors, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Chief Financial Officer or Treasurer or an Assistant Treasurer; *provided*, *however*, that where any such bond, debenture or other corporate security shall be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by the Treasurer or an Assistant Treasurer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who shall have signed or attested any bond, debenture or other corporate security, or whose facsimile signature shall appear thereon or on any such interest coupon, shall have ceased to be such officer before the bond, debenture or other corporate security so signed or attested shall have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature shall have been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX

DIVIDENDS

Section 41. Declaration Of Dividends. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors pursuant to law at any regular or special meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 42. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the Board of Directors shall think conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

Section 43. Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

ARTICLE XI

INDEMNIFICATION

Section 44. Indemnification of Directors, Executive Officers, Other Officers, Employees and Other Agents.

- (a) Directors and executive officers. The corporation shall indemnify its directors and executive officers (for the purposes of this Article XI, "executive officers" shall have the meaning defined in Rule 3b-7 promulgated under the 1934 Act) to the extent not prohibited by the DGCL or any other applicable law; provided, however, that the corporation may modify the extent of such indemnification by individual contracts with its directors and executive officers; and, provided, further, that the corporation shall not be required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the DGCL or any other applicable law or (iv) such indemnification is required to be made under subsection (d).
- **(b) Other Officers, Employees and Other Agents.** The corporation shall have power to indemnify its other officers, employees and other agents as set forth in the DGCL or any other applicable law. The Board of Directors shall have the power to delegate the determination of whether indemnification shall be given to any such person except executive officers to such officers or other persons as the Board of Directors shall determine.

(c) Expenses. The corporation shall advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or executive officer, of the corporation, or is or was serving at the request of the corporation as a director or executive officer of another corporation, partnership, joint venture, trust or other enterprise, prior to the final disposition of the proceeding, promptly following request therefor, all expenses incurred by any director or executive officer in connection with such proceeding provided, however, that if the DGCL requires, an advancement of expenses incurred by a director or executive officer in his or her capacity as a director or executive officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the corporation of an undertaking (hereinafter an "undertaking"), by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (hereinafter a "final adjudication") that such indemnitee is not entitled to be indemnified for such expenses under this section or otherwise.

Notwithstanding the foregoing, unless otherwise determined pursuant to paragraph (e) of this section, no advance shall be made by the corporation to an executive officer of the corporation (except by reason of the fact that such executive officer is or was a director of the corporation in which event this paragraph shall not apply) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, if a determination is reasonably and promptly made (i) by a majority vote of directors who were not parties to the proceeding, even if not a quorum, or (ii) by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or (iii) if there are no such directors, or such directors so direct, by independent legal counsel in a written opinion, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation.

(d) Enforcement. Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and executive officers under this Bylaw shall be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the corporation and the director or executive officer. Any right to indemnification or advances granted by this section to a director or executive officer shall be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within ninety (90) days of request therefor. To the extent permitted by law, the claimant in such enforcement action, if successful in whole or in part, shall be entitled to be paid also the expense of prosecuting the claim. In connection with any claim for indemnification, the corporation shall be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the DGCL or any other applicable law for the corporation to indemnify the claimant for the amount claimed. In connection with any claim by an executive officer of the corporation (except in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such executive officer is or was a director of the corporation) for advances, the corporation shall be entitled to raise a defense as to any such action clear and convincing evidence that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation, or with respect to any criminal action or proceeding that such person acted without reasonable cause to believe that his conduct was lawful. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he has met the applicable standard of conduct set forth in the DGCL or any other applicable law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, shall be a defense to the action or create a

presumption that claimant has not met the applicable standard of conduct. In any suit brought by a director or executive officer to enforce a right to indemnification or to an advancement of expenses hereunder, the burden of proving that the director or executive officer is not entitled to be indemnified, or to such advancement of expenses, under this section or otherwise shall be on the corporation.

- **(e)** Non-Exclusivity of Rights. The rights conferred on any person by this Bylaw shall not be exclusive of any other right which such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL, or by any other applicable law.
- **(f) Survival of Rights.** The rights conferred on any person by this Bylaw shall continue as to a person who has ceased to be a director or executive officer or officer, employee or other agent and shall inure to the benefit of the heirs, executors and administrators of such a person.
- **(g) Insurance.** To the fullest extent permitted by the DGCL or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this section.
- **(h) Amendments.** Any repeal or modification of this section shall only be prospective and shall not affect the rights under this Bylaw in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any agent of the corporation.
- (i) Saving Clause. If this Bylaw or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the corporation shall nevertheless indemnify each director and executive officer to the full extent not prohibited by any applicable portion of this section that shall not have been invalidated, or by any other applicable law. If this section shall be invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation shall indemnify each director and executive officer to the full extent under any other applicable law.
 - **(j) Certain Definitions.** For the purposes of this Bylaw, the following definitions shall apply:
- (i) The term "*proceeding*" shall be broadly construed and shall include, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.
- (ii) The term "*expenses*" shall be broadly construed and shall include, without limitation, court costs, attorneys' fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.
- (iii) The term the "corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this section with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

- **(iv)** References to a "*director*," "*executive officer*," "*employee*," or "*agent*" of the corporation shall include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, executive officer, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.
- (v) References to "other enterprises" shall include employee benefit plans; references to "fines" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "serving at the request of the corporation" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "not opposed to the best interests of the corporation" as referred to in this section.

ARTICLE XII

NOTICES

Section 45. Notices.

- (a) Notice To Stockholders. Written notice to stockholders of stockholder meetings shall be given as provided in Section 7 herein. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by law, written notice to stockholders for purposes other than stockholder meetings may be sent by US mail or nationally recognized overnight courier, or by facsimile, telegraph or telex or by electronic mail or other electronic means.
- **(b) Notice To Directors.** Any notice required to be given to any director may be given by the method stated in subsection (a), as otherwise provided in these Bylaws with notice other than one which is delivered personally to be sent to such address as such director shall have filed in writing with the Secretary, or, in the absence of such filing, to the last known address of such director.
- **(c) Affidavit Of Mailing.** An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected, or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.
- **(d) Methods of Notice.** It shall not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.
- **(e) Notice To Person With Whom Communication Is Unlawful.** Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency

for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(f) Notice to Stockholders Sharing an Address. Except as otherwise prohibited under DGCL, any notice given under the provisions of DGCL, the Certificate of Incorporation or the Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent shall have been deemed to have been given if such stockholder fails to object in writing to the corporation within sixty (60) days of having been given notice by the corporation of its intention to send the single notice. Any consent shall be revocable by the stockholder by written notice to the corporation.

ARTICLE XIII

AMENDMENTS

Section 46. Subject to the limitations set forth in Section 44(h) of these Bylaws or the provisions of the Certificate of Incorporation, the Board of Directors is expressly empowered to adopt, amend or repeal the Bylaws of the corporation. Any adoption, amendment or repeal of the Bylaws of the corporation by the Board of Directors shall require the approval of a majority of the authorized number of directors. The stockholders also shall have power to adopt, amend or repeal the Bylaws of the corporation; *provided*, *however*, that, in addition to any vote of the holders of any class or series of stock of the corporation required by law or by the Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then-outstanding shares of the capital stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

ARTICLE XIV

LOANS TO OFFICERS

Section 47. Loans To Officers. Except as otherwise prohibited by applicable law, the corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these Bylaws shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

RAPT THERAPEUTICS, INC. CERTIFICATE OF SECRETARY

I HEREBY CERTIFY THAT:

I am the duly elected and acting Secretary of RAPT THERAPEUTICS, INC., a Delaware corporation (the "Company"); and

Attached hereto is a complete and accurate copy of the Amended and Restated Bylaw Company by Action by Written Consent of the Stockholders of the Company dated in effect.	1 5 5 1 5
Signed on	
	Constant
	Secretary



The Corporation shall furnish without charge to each stockholder who so requests a statement of the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock of the Corporation or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Such requests shall be made to the Corporation's Secretary at the principal office of the Corporation.

KEEP THIS CERTIFICATE IN A SAFE PLACE. IF IT IS LOST, STOLEN, OR DESTROYED THE CORPORATION WILL REQUIRE A BOND INDEMNITY AS A CONDITION TO THE ISSUANCE OF A REPLACEMENT CERTIFICATE.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM - as tenants in common
TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with right of
survivorship and not as tenants
in common
COM PROP - as community property UNIF GIFT MIN ACT - Custodian under Uniform Gifts to Minors Act______ UNIF TRF MIN ACT - Custodian (until age under Uniform Transfers to Minors Act. Additional abbreviations may also be used though not in the above list. FOR VALUE RECEIVED, hereby sell(s), assign(s) and transfer(s) unto PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE (PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING ZIP CODE, OF ASSIGNEE) shares of the capital stock represented by within Certificate, and do hereby irrevocably constitute and appoint _attorney-in-fact to transfer the said stock on the books of the within named Corporation with full power of the substitution in the premises. Dated THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE CERTIFICATE IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATSOEVER. Signature(s) Guaranteed:

Ву_____

THE SIGNATURE(S) SHOULD BE QUARANTEED BY AN ELIGIBLE QUARANTOR INSTITUTION, (BANKS, STOCKBROKERS, SAINING AND LOAN ASSOCIATIONS AND CREDIT UNIONS WITH MEMBERSHIP IN AN APPROVED SIGNATURE QUARANTEE MEDIALLION PROGRAM, PURSUANT TO S.E.C. RULE 1784-15. QUARANTEES BY A NOTARY PUBLIC ARE NOT ACCEPTABLE. SIGNATURE QUARANTEES MUST NOT BE DATED.



Michael Tenta +1 650 843 5636 mtenta@cooley.com

July 22, 2019

RAPT Therapeutics, Inc. 561 Eccles Avenue South San Francisco, CA 94080

Ladies and Gentlemen:

We have acted as counsel to RAPT Therapeutics, Inc., a Delaware corporation (the "*Company*"), in connection with the filing by the Company of a Registration Statement (No. 333-232572) on Form S-1 (the "*Registration Statement*") with the Securities and Exchange Commission, including a related prospectus filed with the Registration Statement (the "*Prospectus*"), covering an underwritten public offering of up to 5,750,000 shares of the Company's common stock, par value \$0.0001 (the "*Shares*"), including up to 750,000 Shares that may be sold by the Company upon exercise of an over-allotment option to be granted to the underwriters.

In connection with this opinion, we have (i) examined and relied upon (a) the Registration Statement and Prospectus, (b) the Company's Amended and Restated Certificate of Incorporation, as amended, and Bylaws, each in effect as of the date hereof, (c) the forms of the Company's Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, filed as Exhibits 3.5 and 3.7 to the Registration Statement, respectively, each of which is to be in effect immediately prior to the closing of the offering contemplated by the Registration Statement, and (d) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below and (ii) assumed the Board of Directors of the Company or a duly authorized committee thereof has taken action to set the sale price of the Shares. We have assumed the genuineness and authenticity of all documents submitted to us as originals, and the conformity to originals of all documents submitted to us as copies and the due execution and delivery, other than by the Company, of all documents where due execution and delivery are a prerequisite to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought independently to verify such matters.

Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion to the extent that any other laws are applicable to the subject matter hereof and express no opinion and provide no assurance as to compliance with any federal or state securities law, rule or regulation.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that the Shares, when sold and issued against payment therefore as described in with the Registration Statement and the Prospectus, will be validly issued, fully paid and non-assessable.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement.

Cooley LLP 3175 Hanover Street Palo Alto, CA 94304-1130 t: (650) 843-5000 f: (650) 849-7400 cooley.com



July 22, 2019 Page Two

Sincerely,

Cooley LLP

By: /s/ Michael Tenta

Michael Tenta

Cooley LLP 3175 Hanover Street Palo Alto, CA 94304-1130 t: (650) 843-5000 f: (650) 849-7400 cooley.com

RAPT THERAPEUTICS, INC.

2019 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: JUNE 27, 2019
APPROVED BY THE STOCKHOLDERS: JULY 18, 2019
IPO DATE: ________, 2019

1. GENERAL.

- (a) Successor to and Continuation of Prior Plan. The Plan is intended as the successor to and continuation of the Company's 2015 Stock Plan (the "*Prior Plan*"). From and after 12:01 a.m. Pacific time on the IPO Date, no additional awards will be granted under the Prior Plan. All Awards granted on or after 12:01 a.m. Pacific Time on the IPO Date will be granted under this Plan. All awards granted under the Prior Plan will remain subject to the terms of the Prior Plan.
- (i) Any shares that would otherwise remain available for future grants under the Prior Plan as of 12:01 a.m. Pacific Time on the IPO Date (the "*Prior Plan's Available Reserve*") will cease to be available under the Prior Plan at such time. Instead, that number of shares of Common Stock equal to the Prior Plan's Available Reserve will be added to the Share Reserve (as further described in Section 3(a) below) and will be immediately available for grants and issuance pursuant to Stock Awards hereunder, up to the maximum number set forth in Section 3(a) below.
- (ii) In addition, from and after 12:01 a.m. Pacific time on the IPO Date, any shares subject, at such time, to outstanding stock awards granted under the Prior Plan that (i) expire or terminate for any reason prior to exercise or settlement; (ii) are forfeited because of the failure to meet a contingency or condition required to vest such shares or otherwise return to the Company; or (iii) are reacquired, withheld (or not issued) to satisfy a tax withholding obligation in connection with an award or to satisfy the purchase price or exercise price of a stock award (such shares the "*Returning Shares*") will immediately be added to the Share Reserve (as further described in Section 3(a) below) as and when such shares become Returning Shares, up to the maximum number set forth in Section 3(a) below.
 - **(b)** Eligible Award Recipients. Employees, Directors and Consultants are eligible to receive Awards.
- (c) Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Stock Appreciation Rights, (iv) Restricted Stock Awards, (v) Restricted Stock Unit Awards, (vi) Performance Stock Awards, (vii) Performance Cash Awards, and (viii) Other Stock Awards.
- **(d) Purpose.** The Plan, through the grant of Awards, is intended to help the Company secure and retain the services of eligible award recipients, provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate, and provide a means by which the eligible recipients may benefit from increases in value of the Common Stock.

2. ADMINISTRATION.

- **(a) Administration by Board.** The Board will administer the Plan. The Board may delegate administration of the Plan to a Committee or Committees, as provided in Section 2(c).
 - (b) Powers of Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:
- (i) To determine: (A) who will be granted Awards; (B) when and how each Award will be granted; (C) what type of Award will be granted; (D) the provisions of each Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Award; (E) the number of shares of Common Stock subject to, or the cash value of, an Award; and (F) the Fair Market Value applicable to a Stock Award.
- (ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Awards. The Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement or in the written terms of a Performance Cash Award, in a manner and to the extent it will deem necessary or expedient to make the Plan or Award fully effective.
 - (iii) To settle all controversies regarding the Plan and Awards granted under it.
- (iv) To accelerate, in whole or in part, the time at which an Award may be exercised or vest (or the time at which cash or shares of Common Stock may be issued in settlement thereof).
- (v) To suspend or terminate the Plan at any time. Except as otherwise provided in the Plan or an Award Agreement, suspension or termination of the Plan will not materially impair a Participant's rights under the Participant's then-outstanding Award without the Participant's written consent, except as provided in subsection (viii) below.
- (vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, by adopting amendments relating to Incentive Stock Options and certain nonqualified deferred compensation under Section 409A of the Code and/or bringing the Plan or Awards granted under the Plan into compliance with the requirements for Incentive Stock Options or ensuring that they are exempt from, or compliant with, the requirements for nonqualified deferred compensation under Section 409A of the Code, subject to the limitations, if any, of applicable law. If required by applicable law or listing requirements, and except as provided in Section 9(a) relating to Capitalization Adjustments, the Company will seek stockholder approval of any amendment of the Plan that (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class of individuals eligible to receive Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan, (D) materially reduces the price at which shares of

Common Stock may be issued or purchased under the Plan, (E) materially extends the term of the Plan, or (F) materially expands the types of Awards available for issuance under the Plan. Except as otherwise provided in the Plan or an Award Agreement, no amendment of the Plan will materially impair a Participant's rights under an outstanding Award without the Participant's written consent.

- (vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of (A) Section 422 of the Code regarding "incentive stock options" or (B) Rule 16b-3.
- (viii) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; provided, however, that a Participant's rights under any Award will not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, (1) a Participant's rights will not be deemed to have been impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights, and (2) subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Awards without the affected Participant's consent (A) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (B) to change the terms of an Incentive Stock Option, if such change results in impairment of the Award solely because it impairs the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (C) to clarify the manner of exemption from, or to bring the Award into compliance with, Section 409A of the Code; or (D) to comply with other applicable laws or listing requirements.
- **(ix)** Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.
- (x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Award Agreement that are required for compliance with the laws of the relevant foreign jurisdiction).
- (xi) To effect, with the consent of any adversely affected Participant, (A) the reduction of the exercise, purchase or strike price of any outstanding Stock Award; (B) the cancellation of any outstanding Stock Award and the grant in substitution therefor of a new (1) Option or SAR, (2) Restricted Stock Award, (3) Restricted Stock Unit Award, (4) Other Stock Award, (5) cash and/or (6) other valuable consideration determined by the Board, in its sole discretion, with any such substituted award (x) covering the same or a different number of shares of Common Stock as the cancelled Stock Award and (y) granted under the Plan or another equity or compensatory plan of the Company; or (C) any other action that is treated as a repricing under generally accepted accounting principles.

(c) Delegation to Committee.

- (i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be construed as being to the Committee or subcommittee, as applicable). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board or Committee (as applicable). The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated.
 - (ii) Rule 16b-3 Compliance. The Committee may consist solely of two or more Non-Employee Directors in accordance with Rule 16b-3.
- (d) Delegation to an Officer. The Board may delegate to one (1) or more Officers the authority to do one or both of the following (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by applicable law, other Stock Awards) and, to the extent permitted by applicable law, the terms of such Awards, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; *provided*, *however*, that the Board resolutions regarding such delegation will specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Any such Stock Awards will be granted on the form of Stock Award Agreement most recently approved for use by the Committee or the Board, unless otherwise provided in the resolutions approving the delegation authority. The Board may not delegate authority to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) to determine the Fair Market Value pursuant to Section 13(w)(iii) below.
- **(e) Effect of Board's Decision.** All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to Section 9(a) relating to Capitalization Adjustments, and the following sentence regarding the annual increase, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards will not exceed 3,481,819 shares (the "Share Reserve"), which number is the sum of (i) 1,786,166 new shares, *plus* (ii) the number of shares subject to the Prior Plan's Available Reserve, *plus* (iii) the number of shares that are Returning Shares, as such shares become available from time to time.

In addition, the Share Reserve will automatically increase on January 1st of each year, for a period of not more than ten years, commencing on January 1st of the year following the year in which the IPO Date occurs and ending on (and including) January 1, 2029, in an amount equal to 4% of the total number of shares of Capital Stock outstanding on December 31st of the preceding calendar year. Notwithstanding the foregoing, the Board may act prior to January 1st of a given year to provide that there will be no January 1st increase in the Share Reserve for such year or that the increase in the Share Reserve for such year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence.

For clarity, the Share Reserve in this Section 3(a) is a limitation on the number of shares of Common Stock that may be issued pursuant to the Plan. Accordingly, this Section 3(a) does not limit the granting of Stock Awards except as provided in Section 7(a). Shares may be issued in connection with a merger or acquisition as permitted by NASDAQ Listing Rule 5635(c) or, if applicable, NYSE Listed Company Manual Section 303A.08, AMEX Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

- **(b) Reversion of Shares to the Share Reserve.** If a Stock Award or any portion thereof (i) expires or otherwise terminates without all of the shares covered by such Stock Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement will not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan. If any shares of Common Stock issued pursuant to a Stock Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the Plan. Any shares reacquired by the Company in satisfaction of tax withholding obligations on a Stock Award or as consideration for the exercise or purchase price of a Stock Award will again become available for issuance under the Plan.
- **(c) Incentive Stock Option Limit.** Subject to the provisions of Section 9(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options will equal three times the Share Reserve.
- **(d) Limitation on Grants to Non-Employee Directors.** The maximum number of shares of Common Stock subject to Stock Awards granted under the Plan or otherwise during any one calendar year to any Non-Employee Director, taken together with any cash fees paid by the Company to such Non-Employee Director during such calendar year for service on the Board, will not exceed \$750,000 in total value (calculating the value of any such Stock Awards based on the grant date fair value of such Stock Awards for financial reporting purposes), or, with respect to the calendar year in which a Non-Employee Director is first appointed or elected to the Board, \$1,000,000.
- **(e) Source of Shares.** The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

4. ELIGIBILITY.

(a) Eligibility for Specific Stock Awards. Incentive Stock Options may be granted only to employees of the Company or a "parent corporation" or "subsidiary corporation" thereof (as such terms are defined in Sections 424(e) and 424(f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided*, *however*, that Stock Awards may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any "parent" of the Company, as such term is defined in Rule 405 of the Securities Act, unless (i) the stock underlying such Stock Awards is treated as "service recipient stock" under Section 409A of the Code (for example, because the Stock Awards are granted pursuant to a corporate transaction such as a spin off transaction), (ii) the Company, in consultation with its legal counsel, has determined that such Stock Awards are otherwise exempt from Section 409A of the Code, or (iii) the Company, in consultation with its legal counsel, has determined that such Stock Awards comply with the distribution requirements of Section 409A of the Code.

(b) Ten Percent Stockholders. A Ten Percent Stockholder will not be granted an Incentive Stock Option unless the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five years from the date of grant.

5. PROVISIONS RELATING TO OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option or SAR will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, or if an Option is designated as an Incentive Stock Option under the applicable rules, then the Option (or portion thereof) will be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; *provided*, *however*, that each Award Agreement will conform to (through incorporation of provisions hereof by reference in the applicable Award Agreement or otherwise) the substance of each of the following provisions:

- **(a) Term.** Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of its grant or such shorter period specified in the Award Agreement.
- **(b)** Exercise Price. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will be not less than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Award is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value of the Common Stock subject to the Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Section 409A of the Code and, if applicable, Section 424(a) of the Code. Each SAR will be denominated in shares of Common Stock equivalents.

- **(c) Purchase Price for Options.** The purchase price of Common Stock acquired pursuant to the exercise of an Option may be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board will have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to use a particular method of payment. The permitted methods of payment are as follows:
 - (i) by cash, check, bank draft or money order payable to the Company;
- (ii) pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of the stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds;
 - (iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock;
- (iv) if an Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price; provided, however, that the Company will accept a cash or other payment from the Participant to the extent of any remaining balance of the aggregate exercise price not satisfied by such reduction in the number of whole shares to be issued. Shares of Common Stock will no longer be subject to an Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations; or
 - (v) in any other form of legal consideration that may be acceptable to the Board and specified in the applicable Award Agreement.
- (d) Exercise and Payment of a SAR. To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Stock Appreciation Right Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is exercising the SAR on such date, over (B) the aggregate strike price of the number of Common Stock equivalents with respect to which the Participant is exercising the SAR on such date. The appreciation distribution may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Award Agreement evidencing such SAR.

- **(e) Transferability of Options and SARs.** The Board may, in its sole discretion, impose such limitations on the transferability of Options and SARs as the Board will determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options and SARs will apply:
- (i) Restrictions on Transfer. An Option or SAR will not be transferable except by will or by the laws of descent and distribution (or pursuant to subsections (ii) and (iii) below), and will be exercisable during the lifetime of the Participant only by the Participant. The Board may permit transfer of the Option or SAR in a manner that is not prohibited by applicable tax and securities laws. Except as explicitly provided in the Plan, neither an Option nor a SAR may be transferred for consideration.
- (ii) Domestic Relations Orders. Subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulations Section 1.421-1(b)(2). If an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.
- (iii) Beneficiary Designation. Subject to the approval of the Board or a duly authorized Officer, a Participant may, by delivering written notice to the Company, in a form approved by the Company (or the designated broker), designate a third party who, on the death of the Participant, will thereafter be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, upon the death of the Participant, the executor or administrator of the Participant's estate will be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. However, the Company may prohibit designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.
- **(f) Vesting Generally.** The total number of shares of Common Stock subject to an Option or SAR may vest and become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of Performance Goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options or SARs may vary. The provisions of this Section 5(f) are subject to any Option or SAR provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.
- **(g) Termination of Continuous Service.** Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause and other than upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Award as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the date that is 90 days following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the applicable Award Agreement), and (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR (as applicable) within the applicable time frame, the Option or SAR will terminate.

- (h) Extension of Termination Date. If the exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause and other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR will terminate on the earlier of (i) the expiration of a total period of time (that need not be consecutive) equal to the applicable post termination exercise period after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement. In addition, unless otherwise provided in a Participant's Award Agreement, if the sale of any Common Stock received on exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option or SAR will terminate on the earlier of (i) the expiration of a period of months (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, or (ii) the expiration of the term of the Option or SAR as set forth in the applicable Award Agreement.
- (i) Disability of Participant. Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date 12 months following such termination of Continuous Service (or such longer or shorter period specified in the Award Agreement), and (ii) the expiration of the term of the Option or SAR as set forth in the Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR (as applicable) will terminate.
- (j) Death of Participant. Except as otherwise provided in the applicable Award Agreement or other agreement between the Participant and the Company, if (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Award Agreement for exercisability after the termination of the Participant's Continuous Service for a reason other than death, then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the date 18 months following the date of death (or such longer or shorter period specified in the Award Agreement), and (ii) the expiration of the term of such Option or SAR as set forth in the Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the applicable time frame, the Option or SAR (as applicable) will terminate.

- **(k) Termination for Cause.** Except as explicitly provided otherwise in a Participant's Award Agreement or other individual written agreement between the Company and the Participant, if a Participant's Continuous Service is terminated for Cause, the Option or SAR will terminate immediately upon such Participant's termination of Continuous Service, and the Participant will be prohibited from exercising his or her Option or SAR from and after the time of such termination of Continuous Service.
- (l) Non-Exempt Employees. If an Option or SAR is granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, the Option or SAR will not be first exercisable for any shares of Common Stock until at least six months following the date of grant of the Option or SAR (although the Award may vest prior to such date). Consistent with the provisions of the Worker Economic Opportunity Act, (i) if such non-exempt Employee dies or suffers a Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued, or substituted, (iii) upon a Change in Control, or (iv) upon the Participant's retirement (as such term may be defined in the Participant's Award Agreement in another agreement between the Participant and the Company, or, if no such definition, in accordance with the Company's then current employment policies and guidelines), the vested portion of any Options and SARs may be exercised earlier than six months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay. To the extent permitted and/or required for compliance with the Worker Economic Opportunity Act to ensure that any income derived by a non-exempt employee in connection with the exercise, vesting or issuance of any shares under any other Stock Award will be exempt from the employee's regular rate of pay, the provisions of this Section 5(l) will apply to all Stock Awards and are hereby incorporated by reference into such Stock Award Agreements.

6. PROVISIONS OF STOCK AWARDS OTHER THAN OPTIONS AND SARS.

- (a) Restricted Stock Awards. Each Restricted Stock Award Agreement will be in such form and will contain such terms and conditions as the Board will deem appropriate. To the extent consistent with the Company's bylaws, at the Board's election, shares of Common Stock may be (x) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (y) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical. Each Restricted Stock Award Agreement will conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:
- (i) Consideration. A Restricted Stock Award may be awarded in consideration for (A) cash, check, bank draft or money order payable to the Company, (B) past or future services to the Company or an Affiliate, or (C) any other form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

- (ii) Vesting. Shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.
- (iii) Termination of Participant's Continuous Service. If a Participant's Continuous Service terminates, the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.
- **(iv) Transferability.** Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement will be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board will determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.
- **(v) Dividends.** A Restricted Stock Award Agreement may provide that any dividends paid on Restricted Stock will be subject to the same vesting and forfeiture restrictions as apply to the shares subject to the Restricted Stock Award to which they relate.
- **(b) Restricted Stock Unit Awards.** Each Restricted Stock Unit Award Agreement will be in such form and will contain such terms and conditions as the Board will deem appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical. Each Restricted Stock Unit Award Agreement will conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:
- (i) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.
- (ii) Vesting. At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.
- (iii) Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.
- **(iv) Additional Restrictions.** At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

- **(v) Dividend Equivalents.** Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.
- **(vi) Termination of Participant's Continuous Service.** Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(c) Performance Awards.

- (i) Performance Stock Awards. A Performance Stock Award is a Stock Award that is payable (including that may be granted, may vest or may be exercised) contingent upon the attainment during a Performance Period of certain Performance Goals. A Performance Stock Award may, but need not, require the Participant's completion of a specified period of Continuous Service. The length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained will be conclusively determined by the Board or Committee, in its sole discretion. In addition, to the extent permitted by applicable law and the applicable Award Agreement, the Board (or Committee, as the case may be) may determine that cash may be used in payment of Performance Stock Awards.
- (ii) Performance Cash Awards. A Performance Cash Award is a cash award that is payable contingent upon the attainment during a Performance Period of certain Performance Goals. A Performance Cash Award may also require the completion of a specified period of Continuous Service. At the time of grant of a Performance Cash Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, and the measure of whether and to what degree such Performance Goals have been attained will be conclusively determined by the Board or Committee, in its sole discretion. The Board (or Committee, as the case may be) may specify the form of payment of Performance Cash Awards, which may be cash or other property, or may provide for a Participant to have the option for his or her Performance Cash Award, or such portion thereof as the Board (or Committee, as the case may be) may specify, to be paid in whole or in part in cash or other property.
- (iii) Board Discretion. The Board (or Committee, as the case may be) retains the discretion to adjust or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for a Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement or the written terms of a Performance Cash Award.

(d) Other Stock Awards. Other forms of Stock Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than 100% of the Fair Market Value of the Common Stock at the time of grant) may be granted either alone or in addition to Stock Awards provided for under Section 5 and the preceding provisions of this Section 6. Subject to the provisions of the Plan, the Board will have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards.

7. COVENANTS OF THE COMPANY.

- **(a) Availability of Shares.** The Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy then-outstanding Awards.
- **(b) Securities Law Compliance.** The Company will seek to obtain from each regulatory commission or agency, as necessary, such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise or vesting of the Stock Awards; *provided*, *however*, that this undertaking will not require the Company to register under the Securities Act or other securities or applicable laws, the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary or advisable for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise or vesting of such Stock Awards unless and until such authority is obtained. A Participant will not be eligible for the grant of an Award or the subsequent issuance of cash or Common Stock pursuant to the Award if such grant or issuance would be in violation of any applicable law.
- **(c) No Obligation to Notify or Minimize Taxes.** The Company will have no duty or obligation to any Participant to advise such holder as to the tax treatment or time or manner of exercising such Stock Award. Furthermore, the Company will have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award.

8. MISCELLANEOUS.

- **(a) Use of Proceeds from Sales of Common Stock.** Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.
- **(b) Corporate Action Constituting Grant of Awards.** Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board

consents, resolutions or minutes) documenting the corporate action constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents as a result of a clerical error in the papering of the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.

- **(c) Stockholder Rights.** No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to an Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the issuance of shares of Common Stock under, the Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to such Award has been entered into the books and records of the Company.
- (d) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or will affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the state or foreign jurisdiction in which the Company or the Affiliate is domiciled or incorporated, as the case may be.
- **(e) Change in Time Commitment.** In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board has the right in its sole discretion to (x) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (y) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.
- **(f) Incentive Stock Option Limitations.** To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

- (g) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that such Participant is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, will be inoperative if (A) the issuance of the shares upon the exercise or acquisition of Common Stock under the Award has been registered under a then currently effective registration statement under the Securities Act, or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.
- **(h) Withholding Obligations.** Unless prohibited by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; *provided*, *however*, that no shares of Common Stock are withheld with a value exceeding the maximum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid classification of the Stock Award as a liability for financial accounting purposes); (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Award Agreement.
- (i) Electronic Delivery. Any reference herein to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access).
- (j) Deferrals. To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant's termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(k) Compliance with Section 409A of the Code. Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A of the Code, and, to the extent not so exempt, in compliance with Section 409A of the Code. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A of the Code, the Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes "deferred compensation" under Section 409A of the Code is a "specified employee" for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six months following the date of such Participant's "separation from service" (as defined in Section 409A of the Code without regard to alternative definitions thereunder) or, if earlier, the date of the Participant's death, unless such distribution or payment can be made in a manner that complies with Section 409A of the Code, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(I) Clawback/Recovery. All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the Dodd-Frank Wall Street Reform and Consumer Protection Act or other applicable law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of an event constituting Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a right to resign for "good reason" or "constructive termination" (or similar term) under any agreement with the Company.

9. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) of securities by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(c) and (iv) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive.

- **(b) Dissolution.** Except as otherwise provided in the Stock Award Agreement, in the event of a Dissolution of the Company, all outstanding Stock Awards (other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such Dissolution, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service; *provided*, *however*, that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock Awards have not previously expired or terminated) before the Dissolution is completed but contingent on its completion.
- **(c) Transaction.** The following provisions shall apply to Stock Awards in the event of a Transaction unless otherwise provided in the instrument evidencing the Stock Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of a Stock Award. In the event of a Transaction, then, notwithstanding any other provision of the Plan, the Board shall take one or more of the following actions with respect to Stock Awards, contingent upon the closing or completion of the Transaction:
- (i) arrange for the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) to assume or continue the Stock Award or to substitute a similar stock award for the Stock Award (including, but not limited to, an award to acquire the same consideration paid to the stockholders of the Company pursuant to the Transaction);
- (ii) arrange for the assignment of any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to the Stock Award to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company);
- (iii) accelerate the vesting, in whole or in part, of the Stock Award (and, if applicable, the time at which the Stock Award may be exercised) to a date prior to the effective time of such Transaction as the Board shall determine (or, if the Board shall not determine such a date, to the date that is five days prior to the effective date of the Transaction), with such Stock Award terminating if not exercised (if applicable) at or prior to the effective time of the Transaction;
- (iv) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by the Company with respect to the Stock Award;
- (v) cancel or arrange for the cancellation of the Stock Award, to the extent not vested or not exercised prior to the effective time of the Transaction, in exchange for such cash consideration, if any, as the Board, in its sole discretion, may consider appropriate; and
- (vi) make a payment, in such form as may be determined by the Board equal to the excess, if any, of (A) the value of the property the Participant would have received upon the exercise of the Stock Award immediately prior to the effective time of the Transaction, over (B) any exercise price payable by such holder in connection with such exercise. For clarity, this payment may be zero (\$0) if the value of the property is equal to or less than the exercise price. Payments under this provision may be delayed to the same extent that payment of consideration to the holders of Common Stock in connection with the Transaction is delayed as a result of escrows, earn outs, holdbacks or other contingencies.

The Board need not take the same action or actions with respect to all Stock Awards or portions thereof or with respect to all Participants. The Board may take different actions with respect to the vested and unvested portions of a Stock Award.

(d) Change in Control. A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant.

10. PLAN TERM; EARLIER TERMINATION OR SUSPENSION OF THE PLAN.

The Board may suspend or terminate the Plan at any time. No Incentive Stock Options may be granted after the tenth anniversary of the earlier of (i) the date the Plan is adopted by the Board (the "*Adoption Date*"), or (ii) the date the Plan is approved by the stockholders of the Company. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

11. EXISTENCE OF THE PLAN; TIMING OF FIRST GRANT OR EXERCISE.

The Plan will come into existence on the Adoption Date; *provided*, *however*, that no Stock Award may be granted prior to the IPO Date. In addition, no Stock Award will be exercised (or, in the case of a Restricted Stock Award, Restricted Stock Unit Award, Performance Stock Award, or Other Stock Award, no Stock Award will be granted) and no Performance Cash Award will be settled unless and until the Plan has been approved by the stockholders of the Company, which approval will be within 12 months after the date the Plan is adopted by the Board.

12. CHOICE OF LAW.

The law of the State of Delaware will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

- **13. DEFINITIONS.** As used in the Plan, the following definitions will apply to the capitalized terms indicated below:
- (a) "Affiliate" means, at the time of determination, any "parent" or "subsidiary" of the Company as such terms are defined in Rule 405 of the Securities Act. The Board will have the authority to determine the time or times at which "parent" or "subsidiary" status is determined within the foregoing definition.
 - (b) "Award" means a Stock Award or a Performance Cash Award.

- (c) "Award Agreement" means a written agreement between the Company and a Participant evidencing the terms and conditions of an Award.
- (d) "Board" means the Board of Directors of the Company.
- (e) "Capital Stock" means each and every class of common stock of the Company, regardless of the number of votes per share.
- **(f)** "Capitalization Adjustment" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Adoption Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.
- (g) "Cause" shall have the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant's commission of any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (ii) such Participant's attempted commission of, or participation in, a fraud or act of dishonesty against the Company; (iii) such Participant's intentional, material violation of any contract or agreement between the Participant and the Company or of any statutory duty owed to the Company; (iv) such Participant's unauthorized use or disclosure of the Company's confidential information or trade secrets; or (v) such Participant's gross misconduct. The determination that a termination of the Participant's Continuous Service is either for Cause or without Cause shall be made by the Company, in its sole discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant shall have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.
- **(h)** "Change in Control" means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:
- (i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control will not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company's securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, (C) on account of the acquisition of securities

of the Company by any individual who is, on the IPO Date, either an executive officer or a Director (either, an "IPO Investor") and/or any entity in which an IPO Investor has a direct or indirect interest (whether in the form of voting rights or participation in profits or capital contributions) of more than 50% (collectively, the "IPO Entities") or on account of the IPO Entities continuing to hold shares that come to represent more than 50% of the combined voting power of the Company's then outstanding securities as a result of the conversion of any class of the Company's securities into another class of the Company's securities having a different number of votes per share pursuant to the conversion provisions set forth in the Company's Amended and Restated Certificate of Incorporation; or (D) solely because the level of Ownership held by any Exchange Act Person (the "Subject Person") exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control will be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction; *provided*, *however*, that a merger, consolidation or similar transaction will not constitute a Change in Control under this prong of the definition if the outstanding voting securities representing more than 50% of the combined voting power of the surviving Entity or its parent are owned by the IPO Entities;

(iii) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; *provided, however*, that a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries will not constitute a Change in Control under this prong of the definition if the outstanding voting securities representing more than 50% of the combined voting power of the acquiring Entity or its parent are owned by the IPO Entities;

- **(iv)** the stockholders of the Company approve or the Board approves a plan of complete dissolution or liquidation of the Company, or a complete dissolution or liquidation of the Company will otherwise occur, except for a liquidation into a parent corporation; or
- (v) individuals who, on the date the Plan is adopted by the Board, are members of the Board (the "*Incumbent Board*") cease for any reason to constitute at least a majority of the members of the Board; *provided, however*, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member will, for purposes of this Plan, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing definition or any other provision of the Plan, the term Change in Control will not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company and the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant will supersede the foregoing definition with respect to Awards subject to such agreement; *provided*, *however*, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition will apply.

- (i) "Code" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.
- (j) "Committee" means a committee of one or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).
- (k) "Common Stock" means, as of the IPO Date, the common stock of the Company, having one vote per share.
- (I) "Company" means RAPT Therapeutics, Inc., a Delaware corporation.
- (m) "Consultant" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company's securities to such person.
- (n) "Continuous Service" means that the Participant's service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Consultant or Director or a change in the entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant's service with the Company or an Affiliate, will not terminate a Participant's Continuous Service; provided, however, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, in its sole discretion, such Participant's

Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.

- **(o)** "Corporate Transaction" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:
- (i) a sale or other disposition of all or substantially all, as determined by the Board, in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;
 - (ii) a sale or other disposition of more than 50% of the outstanding securities of the Company;
 - (iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or
- **(iv)** a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.
 - (p) "Director" means a member of the Board.
- (q) "Disability" means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or that has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Sections 22(e)(3) and 409A(a)(2)(c)(i) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.
- **(r)** "*Dissolution*" means when the Company, after having executed a certificate of dissolution with the State of Delaware (or other applicable state), has completely wound up its affairs. Conversion of the Company into a Limited Liability Company (or any other pass-through entity) will not be considered a "Dissolution" for purposes of the Plan.
- **(s)** "*Employee*" means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.

- (t) "Entity" means a corporation, partnership, limited liability company or other entity.
- (u) "Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.
- (v) "Exchange Act Person" means any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that "Exchange Act Person" will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or "group" (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the IPO Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company's then outstanding securities.
 - (w) "Fair Market Value" means, as of any date, the value of the Common Stock determined as follows:
- (i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.
- (ii) Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.
- (iii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.
- (x) "Incentive Stock Option" means an option granted pursuant to Section 5 of the Plan that is intended to be, and qualifies as, an "incentive stock option" within the meaning of Section 422 of the Code.
- **(y)** "*IPO Date*" means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.
- **(z)** "Non-Employee Director" means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not

be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act ("*Regulation S-K*")), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a "non-employee director" for purposes of Rule 16b-3.

- (aa) "Nonstatutory Stock Option" means any Option granted pursuant to Section 5 of the Plan that does not qualify as an Incentive Stock Option.
- (bb) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.
- (cc) "Option" means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.
- (dd) "Option Agreement" means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement will be subject to the terms and conditions of the Plan.
- **(ee)** "Optionholder" means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.
- **(ff)** "Other Stock Award" means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 6(d).
- **(gg)** "Other Stock Award Agreement" means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement will be subject to the terms and conditions of the Plan.
- **(hh)** "Own," "Owned," "Owner," "Ownership" means a person or Entity will be deemed to "Own," to have "Owned," to be the "Owner" of, or to have acquired "Ownership" of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.
- (ii) "Participant" means a person to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.
 - (ij) "Performance Cash Award" means an award of cash granted pursuant to the terms and conditions of Section 6(c)(ii).
- **(kk)** "*Performance Criteria*" means the one or more criteria that the Board or Committee (as applicable) will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board: (i) earnings (including earnings per share and net earnings); (ii) earnings before interest, taxes and depreciation; (iii) earnings before interest, taxes, depreciation and amortization; (iv) total

stockholder return; (v) return on equity or average stockholder's equity; (vi) return on assets, investment, or capital employed; (vii) stock price; (viii) margin (including gross margin); (ix) income (before or after taxes); (x) operating income; (xi) operating income after taxes; (xii) pre-tax profit; (xiii) operating cash flow; (xiv) sales or revenue targets; (xv) increases in revenue or product revenue; (xvi) expenses and cost reduction goals; (xvii) improvement in or attainment of working capital levels; (xviii) economic value added (or an equivalent metric); (xix) market share; (xx) cash flow; (xxi) cash flow per share; (xxii) share price performance; (xxiii) debt reduction; (xxiv) customer satisfaction; (xxv) stockholders' equity; (xxvi) capital expenditures; (xxvii) debt levels; (xxviii) operating profit or net operating profit; (xxix) workforce diversity; (xxx) growth of net income or operating income; (xxxii) billings; (xxxii) pre-clinical development related compound goals; (xxxiii) financing; (xxxiv) regulatory milestones, including approval of a compound; (xxxv) stockholder liquidity; (xxvi) corporate governance and compliance; (xxxvii) product commercialization; (xxxviii) intellectual property; (xxxix) personnel matters; (xl) progress of internal research or clinical programs; (xli) progress of partnered programs; (xlii) partner satisfaction; (xliii) budget management; (xliv) clinical achievements; (xlv) completing phases of a clinical study (including the treatment phase); (xlvi) announcing or presenting preliminary or final data from clinical studies; in each case, whether on particular timelines or generally; (xlvii) timely completion of clinical trials; (xlviii) submission of INDs and NDAs and other regulatory achievements; (xlix) partner or collaborator achievements; (1) internal controls, including those related to the Sarbanes-Oxley Act of 2002; (li) research progress, including the development of programs; (lii) investor relations, analysts and communication; (liii) manufacturing achievements (including obtaining particular yields from manufacturing runs and other measurable objectives related to process development activities); (liv) strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property; (lv) establishing relationships with commercial entities with respect to the marketing, distribution and sale of the Company's products (including with group purchasing organizations, distributors and other vendors); (Ivi) supply chain achievements (including establishing relationships with manufacturers or suppliers of active pharmaceutical ingredients and other component materials and manufacturers of the Company's products); (lvii) co-development, co-marketing, profit sharing, joint venture or other similar arrangements; (lviii) individual performance goals; (lix) corporate development and planning goals; and (lx) other measures of performance selected by the Board or Committee.

(II) "Performance Goals" means, for a Performance Period, the one or more goals established by the Board or Committee (as applicable) for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of any items that are unusual in nature or occur infrequently as determined under generally accepted accounting principles; (6) to exclude the

dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of common stock of the Company by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company's bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles; and (12) to exclude the effect of any other unusual, non-recurring gain or loss or other extraordinary item. In addition, the Board or Committee (as applicable) retains the discretion to adjust or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Stock Award Agreement or the written terms of a Performance Cash Award.

- (mm) "Performance Period" means the period of time selected by the Board or Committee (as applicable) over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant's right to and the payment of a Stock Award or a Performance Cash Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board or Committee.
 - (nn) "Performance Stock Award" means a Stock Award granted under the terms and conditions of Section 6(c)(i).
 - (00) "Plan" means this RAPT Therapeutics, Inc. 2019 Equity Incentive Plan.
 - (pp) "Restricted Stock Award" means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).
- (qq) "Restricted Stock Award Agreement" means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.
- **(rr)** "Restricted Stock Unit Award" means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).
- **(ss)** "Restricted Stock Unit Award Agreement" means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement will be subject to the terms and conditions of the Plan.
 - (tt) "Rule 16b-3" means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

- (uu) "Securities Act" means the Securities Act of 1933, as amended.
- (vv) "Stock Appreciation Right" or "SAR" means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 5.
- (ww) "Stock Appreciation Right Agreement" means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement will be subject to the terms and conditions of the Plan.
- (xx) "Stock Award" means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, a Stock Appreciation Right, a Performance Stock Award or any Other Stock Award.
- **(yy)** "Stock Award Agreement" means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement will be subject to the terms and conditions of the Plan.
- (zz) "Subsidiary" means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.
- (aaa) "Ten Percent Stockholder" means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.
 - (bbb) "Transaction" means a Corporate Transaction or a Change in Control.

RAPT THERAPEUTICS, INC.

STOCK OPTION GRANT NOTICE (2019 EQUITY INCENTIVE PLAN)

RAPT Therapeutics, Inc. (the "*Company*"), pursuant to its 2019 Equity Incentive Plan (the "*Plan*"), hereby grants to Optionholder an option to purchase the number of shares of the Company's Common Stock set forth below. This option is subject to all of the terms and conditions as set forth in this Stock Option Grant Notice, in the Option Agreement, the Plan and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Option Agreement will have the same definitions as in the Plan or the Option Agreement. If there is any conflict between the terms in this Stock Option Grant Notice and the Plan, the terms of the Plan will control.

Optionholder:				
Date of Grant:				
Vesting Commencement Da	ate:			
Number of Shares Subject t	o Option:			
Exercise Price (Per Share):	_			
Total Exercise Price:	_			
Expiration Date:	_			
Type of Grant:	☐ Incentive Stock Option	on¹ ☐ Nonstatutory Stock Option		
Exercise Schedule:	Same as Vesting Schedule			
Vesting Schedule:	[, subject to Optionholder's Continuous Service as of each such date]			
Payment:	By one or a combination of the following items (described in the Option Agreement):			
	\square By cash, check, bank draft or money order payable to the Company			
\square Pursuant to a Regulation T Program if the shares are publicly traded			I	
	☐ By delivery of already	y-owned shares if the shares are publicly trade	d	
	☐ If and only to the exterior of exercise, by a "net exercise."		and subject to the Company's consent at the time	

If this is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options) cannot be first *exercisable* for more than \$100,000 in value (measured by exercise price) in any calendar year. Any excess over \$100,000 is a Nonstatutory Stock Option.

Additional Terms/Acknowledgements: Optionholder acknowledges receipt of, and understands and agrees to, this Stock Option Grant Notice, the Option Agreement and the Plan. Optionholder acknowledges and agrees that this Stock Option Grant Notice and the Option Agreement may not be modified, amended or revised except as provided in the Plan. Optionholder further acknowledges that as of the Date of Grant, this Stock Option Grant Notice, the Option Agreement, and the Plan set forth the entire understanding between Optionholder and the Company regarding this option award and supersede all prior oral and written agreements, promises and/or representations on that subject with the exception of, if applicable, (i) equity awards previously granted and delivered to Optionholder, (ii) any compensation recovery policy that is adopted by the Company or is otherwise required by applicable law and (iii) any written employment agreement, severance agreement, offer letter or other written agreement entered into between the Company and Participant specifying the terms that should govern this specific option. By accepting this option, Optionholder consents to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

RAPT THERAPEUTICS, INC.		OPTIONHOLDER:		
By:				
-	Signature	Signature		
Title:		Date:		
Date:				

ATTACHMENTS: Option Agreement, 2019 Equity Incentive Plan and Notice of Exercise

ATTACHMENT I

RAPT THERAPEUTICS, INC.

OPTION AGREEMENT (2019 EQUITY INCENTIVE PLAN) (INCENTIVE STOCK OPTION OR NONSTATUTORY STOCK OPTION)

Pursuant to your Stock Option Grant Notice ("*Grant Notice*") and this Option Agreement, RAPT Therapeutics, Inc. (the "*Company*") has granted you an option under its 2019 Equity Incentive Plan (the "*Plan*") to purchase the number of shares of the Company's Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. The option is granted to you effective as of the date of grant set forth in the Grant Notice (the "*Date of Grant*"). If there is any conflict between the terms in this Option Agreement and the Plan, the terms of the Plan will control. Capitalized terms not explicitly defined in this Option Agreement or in the Grant Notice but defined in the Plan will have the same definitions as in the Plan.

The details of your option, in addition to those set forth in the Grant Notice and the Plan, are as follows:

- **1. VESTING.** Subject to the provisions contained herein, your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service.
- **2. NUMBER OF SHARES AND EXERCISE PRICE.** The number of shares of Common Stock subject to your option and your exercise price per share in your Grant Notice will be adjusted for Capitalization Adjustments.
- **3. EXERCISE RESTRICTION FOR NON-EXEMPT EMPLOYEES.** If you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (that is, a "*Non-Exempt Employee*"), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six (6) months of Continuous Service measured from the Date of Grant, even if you have already been an employee for more than six (6) months. Consistent with the provisions of the Worker Economic Opportunity Act, you may exercise your option as to any vested portion prior to such six (6) month anniversary in the case of (i) your death or disability, (ii) a Corporate Transaction in which your option is not assumed, continued or substituted, (iii) a Change in Control or (iv) your termination of Continuous Service on your "retirement" (as defined in the Company's benefit plans).
- **4. METHOD OF PAYMENT.** You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price in cash or by check, bank draft or money order payable to the Company or in any other manner **permitted by your Grant Notice**, which may include one or more of the following:
- (a) Provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a "broker-assisted exercise", "same day sale", or "sell to cover".

- **(b)** Provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock.
- **(c)** If this option is a Nonstatutory Stock Option, subject to the consent of the Company at the time of exercise, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of your option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price. You must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be outstanding under your option and will not be exercisable thereafter if those shares (i) are used to pay the exercise price pursuant to the "net exercise," (ii) are delivered to you as a result of such exercise, and (iii) are withheld to satisfy your tax withholding obligations.
 - **5. WHOLE SHARES.** You may exercise your option only for whole shares of Common Stock.
- **6. SECURITIES LAW COMPLIANCE.** In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).
- **7. TERM.** You may not exercise your option before the Date of Grant or after the expiration of the option's term. The term of your option expires, subject to the provisions of Section 5(h) of the Plan, upon the earliest of the following:
 - (a) immediately upon the termination of your Continuous Service for Cause;
- **(b)** three (3) months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided*, *however*, that if during any part of such three (3) month period your option is not exercisable solely because of the condition set forth in the section above regarding "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three (3) months after the termination of your Continuous Service; *provided further*, if during any part of such three (3) month period, the sale of any Common Stock received upon exercise of your option would violate the Company's insider trading policy, then your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three (3) months after the termination of your Continuous Service during which the sale of the Common Stock received upon exercise of your option would not be in violation of the Company's insider trading policy. Notwithstanding the foregoing, if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six (6) months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven (7) months after the Date of Grant, and (B) the date that is three (3) months after the termination of your Continuous Service, and (y) the Expiration Date;

- **(c)** twelve (12) months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 7(d)) below;
- (d) eighteen (18) months after your death if you die either during your Continuous Service or within three (3) months after your Continuous Service terminates for any reason other than Cause;
 - **(e)** the Expiration Date indicated in your Grant Notice; or
 - **(f)** the day before the tenth (10th) anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the Date of Grant and ending on the day three (3) months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three (3) months after the date your employment with the Company or an Affiliate terminates.

8. EXERCISE.

- (a) You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by (i) delivering a Notice of Exercise (in a form designated by the Company) or completing such other documents and/or procedures designated by the Company for exercise and (ii) paying the exercise price and any applicable withholding taxes to the Company's Secretary, stock plan administrator, or such other person as the Company may designate, together with such additional documents as the Company may then require.
- **(b)** By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.
- (c) If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within fifteen (15) days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two (2) years after the Date of Grant or within one (1) year after such shares of Common Stock are transferred upon exercise of your option.
- **9. TRANSFERABILITY.** Except as otherwise provided in this Section 9, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.

- **(a) Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.
- **(b) Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.
- **(c) Beneficiary Designation.** Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form approved by the Company and any broker designated by the Company to handle option exercises, designate a third party who, on your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.
- **10. OPTION NOT A SERVICE CONTRACT.** Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective stockholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

11. WITHHOLDING OBLIGATIONS.

- (a) At the time you exercise your option, in whole or in part, and at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.
- **(b)** If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the maximum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). Notwithstanding the filing of such election, shares of Common Stock shall be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure shall be your sole responsibility.

- **(c)** You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.
- 12. TAX CONSEQUENCES. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the "fair market value" per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option.
- **13. NOTICES.** Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
- **14. GOVERNING PLAN DOCUMENT.** Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control. In addition, your option (and any compensation paid or shares issued under your option) is subject to recoupment in accordance with The Dodd—Frank Wall Street Reform and Consumer Protection Act and any implementing regulations thereunder, any clawback policy adopted by the Company and any compensation recovery policy otherwise required by applicable law.
- **15. OTHER DOCUMENTS.** You hereby acknowledge receipt of and the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Plan prospectus. In addition, you acknowledge receipt of the Company's policy permitting certain individuals to sell shares only during certain "window" periods and the Company's insider trading policy, in effect from time to time.
- **16. EFFECT ON OTHER EMPLOYEE BENEFIT PLANS.** The value of this option will not be included as compensation, earnings, salaries, or other similar terms used when calculating your benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

- **17. VOTING RIGHTS.** You will not have voting or any other rights as a stockholder of the Company with respect to the shares to be issued pursuant to this option until such shares are issued to you. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this option, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.
- **18. SEVERABILITY.** If all or any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

19. MISCELLANEOUS.

- (a) The rights and obligations of the Company under your option will be transferable to any one or more persons or entities, and all covenants and agreements hereunder will inure to the benefit of, and be enforceable by the Company's successors and assigns.
- **(b)** You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your option.
- **(c)** You acknowledge and agree that you have reviewed your option in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your option, and fully understand all provisions of your option.
- **(d)** This Option Agreement will be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.
- **(e)** All obligations of the Company under the Plan and this Option Agreement will be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.

* * *

This Option Agreement will be deemed to be signed by you upon the signing by you of the Stock Option Grant Notice to which it is attached.

ATTACHMENT II

2019 EQUITY INCENTIVE PLAN

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ATTACHMENT III

NOTICE OF EXERCISE

RAPT THERAPEUTICS, INC.

Date of Exercise:	

This constitutes notice to RAPT Therapeutics, Inc. (the "*Company*") under my stock option that I elect to purchase the below number of shares of Common Stock of the Company (the "*Shares*") for the price set forth below.

Type of option (check one):	Incentive □	Nonstatutory \square
Stock option dated:		
Number of Shares as to which option is exercised:		
Certificates to be issued in name of:		
Total exercise price:	\$	\$
Cash payment delivered herewith:	\$	\$
[Value of Shares delivered herewith1:	\$	\$]
[Value of Shares pursuant to net exercise ² :	\$	\$]
[Regulation T Program (cashless exercise ³):	\$	\$ 1

Shares must meet the public trading requirements set forth in the option. Shares must be valued in accordance with the terms of the option being exercised, and must be owned free and clear of any liens, claims, encumbrances or security interests. Certificates must be endorsed or accompanied by an executed assignment separate from certificate.

The option must be a Nonstatutory Stock Option, and the Company must have established net exercise procedures at the time of exercise, in order to utilize this payment method.

³ Shares must meet the public trading requirements set forth in the option.

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the RAPT Therapeutics, Inc. 2019
Equity Incentive Plan, (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to
the exercise of this option, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within fifteen (15) days after the date of
any disposition of any of the Shares issued upon exercise of this option that occurs within two (2) years after the date of grant of this option or within
one (1) year after such Shares are issued upon exercise of this option.

Vei	ry truly y	ours,			

RAPT THERAPEUTICS, INC.

RESTRICTED STOCK UNIT GRANT NOTICE (2019 EQUITY INCENTIVE PLAN)

RAPT Therapeutics, Inc. (the "Company"), pursuant to its 2019 Equity Incentive Plan (the "Plan"), hereby awards to Participant a Restricted Stock Unit Award for the number of shares of the Company's Common Stock ("Restricted Stock Units") set forth below (the "Award"). The Award is subject to all of the terms and conditions as set forth in this notice of grant (this "Restricted Stock Unit Grant Notice"), and in the Plan and the Restricted Stock Unit Award Agreement (the "Award Agreement"), both of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein shall have the meanings set forth in the Plan or the Award Agreement. In the event of any conflict between the terms in this Restricted Stock Unit Grant Notice or the Award Agreement and the Plan, the terms of the Plan shall control.

Participant:	_					
Date of Gran	ıt:					
Vesting Com	mencement Date:					
Number of R	Restricted Stock Units:					
Vesting Schedule:	[, subject to Par	rticipant's Continuous Service through each such vesting date.]				
Issuance Schedule:	Subject to any Capitalization Adjustment, one share of Common Stock (or its cash equivalent, at the discretion of the Company) will be issued for each Restricted Stock Unit that vests at the time set forth in Section 6 of the Award Agreement.					
the Award Agreement and the Agreement and the Plan set is pursuant to the Award specific of (i) restricted stock unit awaritten agreement entered in compensation recovery police. By accepting this Award, Paland agrees to all of the terms	ne Plan. Participant further acknowledges forth the entire understanding between P Fied above and supersede all prior oral arrowards or options previously granted and out to between the Company and Participan between the Company and Participan between the Company or is contributed acknowledges having received as and conditions set forth in these docum	receipt of, and understands and agrees to, this Restricted Stock Unit Grant Notice, is that as of the Date of Grant, this Restricted Stock Unit Grant Notice, the Award Participant and the Company regarding the acquisition of the Common Stock and written agreements on the terms of this Award, with the exception, if applicable, delivered to Participant, (ii) the written employment agreement, offer letter or other it specifying the terms that should govern this specific Award, and (iii) any otherwise required by applicable law. and read the Restricted Stock Unit Grant Notice, the Award Agreement and the Plan tents. Participant consents to receive Plan documents by electronic delivery and to ished and maintained by the Company or another third party designated by the				
RAPT THERAPEUTICS, INC	C.	PARTICIPANT				
Ву:						
	Signature	Signature				
Title:		Date:				
Datas						

ATTACHMENTS: Award Agreement and 2019 Equity Incentive Plan

ATTACHMENT I

RAPT THERAPEUTICS, INC.

2019 EQUITY INCENTIVE PLAN RESTRICTED STOCK UNIT AWARD AGREEMENT

Pursuant to the Restricted Stock Unit Grant Notice (the "*Grant Notice*") and this Restricted Stock Unit Award Agreement (the "*Agreement*"), RAPT Therapeutics, Inc. (the "*Company*") has awarded you ("*Participant*") a Restricted Stock Unit Award (the "*Award*") pursuant to the Company's 2019 Equity Incentive Plan (the "*Plan*") for the number of Restricted Stock Units/shares indicated in the Grant Notice. Capitalized terms not explicitly defined in this Agreement or the Grant Notice shall have the same meanings given to them in the Plan. The terms of your Award, in addition to those set forth in the Grant Notice, are as follows.

- 1. GRANT OF THE AWARD. This Award represents the right to be issued on a future date one (1) share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 below) as indicated in the Grant Notice. As of the Date of Grant, the Company will credit to a bookkeeping account maintained by the Company for your benefit (the "Account") the number of Restricted Stock Units/shares of Common Stock subject to the Award. Notwithstanding the foregoing, the Company reserves the right to issue you the cash equivalent of Common Stock, in part or in full satisfaction of the delivery of Common Stock in connection with the vesting of the Restricted Stock Units, and, to the extent applicable, references in this Agreement and the Grant Notice to Common Stock issuable in connection with your Restricted Stock Units will include the potential issuance of its cash equivalent pursuant to such right. This Award was granted in consideration of your services to the Company.
- **2. VESTING.** Subject to the limitations contained herein, your Award will vest, if at all, in accordance with the vesting schedule provided in the Grant Notice. Vesting will cease upon the termination of your Continuous Service and the Restricted Stock Units credited to the Account that were not vested on the date of such termination will be forfeited at no cost to the Company and you will have no further right, title or interest in or to such Award or the shares of Common Stock to be issued in respect of such portion of the Award.
- **3. NUMBER OF SHARES.** The number of Restricted Stock Units subject to your Award may be adjusted from time to time for Capitalization Adjustments, as provided in the Plan. Any additional Restricted Stock Units, shares, cash or other property that becomes subject to the Award pursuant to this Section 3, if any, shall be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Restricted Stock Units and shares covered by your Award. Notwithstanding the provisions of this Section 3, no fractional shares or rights for fractional shares of Common Stock shall be created pursuant to this Section 3. Any fraction of a share will be rounded down to the nearest whole share.
- **4. SECURITIES LAW COMPLIANCE.** You may not be issued any Common Stock under your Award unless the shares of Common Stock underlying the Restricted Stock Units are either (i) then registered under the Securities Act, or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Your Award must also comply with other applicable laws and regulations governing the Award, and you shall not receive such Common Stock if the Company determines that such receipt would not be in material compliance with such laws and regulations.

- **5. TRANSFER RESTRICTIONS.** Prior to the time that shares of Common Stock have been delivered to you, you may not transfer, pledge, sell or otherwise dispose of this Award or the shares issuable in respect of your Award, except as expressly provided in this Section 5. For example, you may not use shares that may be issued in respect of your Restricted Stock Units as security for a loan. The restrictions on transfer set forth herein will lapse upon delivery to you of shares in respect of your vested Restricted Stock Units.
- (a) **Death**. Your Award is transferable by will and by the laws of descent and distribution. At your death, vesting of your Award will cease and your executor or administrator of your estate shall be entitled to receive, on behalf of your estate, any Common Stock or other consideration that vested but was not issued before your death.
- **(b) Domestic Relations Orders.** Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your right to receive the distribution of Common Stock or other consideration hereunder, pursuant to a domestic relations order, marital settlement agreement or other divorce or separation instrument as permitted by applicable law that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this Award with the Company General Counsel prior to finalizing the domestic relations order or marital settlement agreement to verify that you may make such transfer, and if so, to help ensure the required information is contained within the domestic relations order or marital settlement agreement.

6. DATE OF ISSUANCE.

- (a) The issuance of shares in respect of the Restricted Stock Units is intended to comply with Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such a manner. Subject to the satisfaction of the Withholding Obligation set forth in Section 11 of this Agreement, in the event one or more Restricted Stock Units vests, the Company shall issue to you one (1) share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 above, and subject to any different provisions in the Grant Notice). Each issuance date determined by this paragraph is referred to as an "Original Issuance Date".
- **(b)** If the Original Issuance Date falls on a date that is not a business day, delivery shall instead occur on the next following business day. In addition, if:
- (i) the Original Issuance Date does not occur (1) during an "open window period" applicable to you, as determined by the Company in accordance with the Company's then-effective policy on trading in Company securities, or (2) on a date when you are otherwise permitted to sell shares of Common Stock on an established stock exchange or stock market (including but not limited to under a previously established written trading plan that meets the requirements of Rule 10b5-1 under the Exchange Act and was entered into in compliance with the Company's policies (a "10b5-1 Arrangement")), and
- (ii) either (1) a Withholding Obligation does not apply, or (2) the Company decides, prior to the Original Issuance Date, (A) not to satisfy the Withholding Obligation by withholding shares of Common Stock from the shares otherwise due, on the Original Issuance Date, to you under this Award, and (B) not to permit you to enter into a "same day sale" commitment with a broker-dealer pursuant to Section 11 of this Agreement (including but not limited to a commitment under a 10b5-1 Arrangement) and (C) not to permit you to pay your Withholding Obligation in cash,

then the shares that would otherwise be issued to you on the Original Issuance Date will not be delivered on such Original Issuance Date and will instead be delivered on the first business day when you are not prohibited from selling shares of the Company's Common Stock in the open public market, but in no event later than December 31 of the calendar year in which the Original Issuance Date occurs (that is, the last day of your taxable year in which the Original Issuance Date occurs), or, if and only if permitted in a manner that complies with Treasury Regulations Section 1.409A-1(b)(4), no later than the date that is the 15th day of the third calendar month of the applicable year following the year in which the shares of Common Stock under this Award are no longer subject to a "substantial risk of forfeiture" within the meaning of Treasury Regulations Section 1.409A-1(d).

- (c) The form of delivery (e.q., a stock certificate or electronic entry evidencing such shares) shall be determined by the Company.
- **7. DIVIDENDS.** You shall receive no benefit or adjustment to your Award with respect to any cash dividend, stock dividend or other distribution that does not result from a Capitalization Adjustment; provided, however, that this sentence will not apply with respect to any shares of Common Stock that are delivered to you in connection with your Award after such shares have been delivered to you.
- **8. RESTRICTIVE LEGENDS.** The shares of Common Stock issued in respect of your Award shall be endorsed with appropriate legends as determined by the Company.
- **9. EXECUTION OF DOCUMENTS.** You hereby acknowledge and agree that the manner selected by the Company by which you indicate your consent to your Grant Notice is also deemed to be your execution of your Grant Notice and of this Agreement. You further agree that such manner of indicating consent may be relied upon as your signature for establishing your execution of any documents to be executed in the future in connection with your Award.

10. AWARD NOT A SERVICE CONTRACT.

- (a) Nothing in this Agreement (including, but not limited to, the vesting of your Award or the issuance of the shares in respect of your Award), the Plan or any covenant of good faith and fair dealing that may be found implicit in this Agreement or the Plan shall: (i) confer upon you any right to continue in the employ or service of, or affiliation with, the Company or an Affiliate; (ii) constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or affiliation; (iii) confer any right or benefit under this Agreement or the Plan unless such right or benefit has specifically accrued under the terms of this Agreement or Plan; or (iv) deprive the Company of the right to terminate you at will and without regard to any future vesting opportunity that you may have.
- **(b)** By accepting this Award, you acknowledge and agree that the right to continue vesting in the Award pursuant to the vesting schedule provided in the Grant Notice may not be earned unless (in addition to any other conditions described in the Grant Notice and this Agreement) you continue as an employee, director or consultant at the will of the Company and affiliate, as applicable (not through the act of being hired, being granted this Award or any other award or benefit) and that the Company has the right to reorganize, sell, spin-out or otherwise restructure one or more of its businesses or Affiliates at any time or from time to time, as it deems appropriate (a "**reorganization**"). You acknowledge and agree that such a reorganization could result in the termination of your Continuous Service, or the termination of Affiliate status of your employer and the loss of benefits available to you under this Agreement, including but not limited to, the termination of the right to continue vesting in the Award. You further acknowledge and agree that this Agreement, the Plan, the transactions contemplated

hereunder and the vesting schedule set forth herein or any covenant of good faith and fair dealing that may be found implicit in any of them do not constitute an express or implied promise of continued engagement as an employee or consultant for the term of this Agreement, for any period, or at all, and shall not interfere in any way with the Company's right to terminate your Continuous Service at any time, with or without your cause or notice, or to conduct a reorganization.

11. WITHHOLDING OBLIGATION.

- (a) On each vesting date, and on or before the time you receive a distribution of the shares of Common Stock in respect of your Restricted Stock Units, and at any other time as reasonably requested by the Company in accordance with applicable tax laws, you hereby authorize any required withholding from the Common Stock issuable to you and/or otherwise agree to make adequate provision, including in cash, for any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or any Affiliate that arise in connection with your Award (the "Withholding Obligation").
- (b) By accepting this Award, you acknowledge and agree that the Company or any Affiliate may, in its sole discretion, satisfy all or any portion of the Withholding Obligation relating to your Restricted Stock Units by any of the following means or by a combination of such means: (i) causing you to pay any portion of the Withholding Obligation in cash; (ii) withholding from any compensation otherwise payable to you by the Company; (iii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to you in connection with the Award with a Fair Market Value (measured as of the date shares of Common Stock are issued pursuant to Section 6) equal to the amount of such Withholding Obligation; provided, however, that the number of such shares of Common Stock so withheld will not exceed the amount necessary to satisfy the Withholding Obligation using the maximum statutory withholding rates for federal, state, local and foreign tax purposes, including payroll taxes, that are applicable to supplemental taxable income; and *provided*, further, that to the extent necessary to qualify for an exemption from application of Section 16(b) of the Exchange Act, if applicable, such share withholding procedure will be subject to the express prior approval of the Board or the Company's Compensation Committee; and/or (iv) permitting or requiring you to enter into a "same day sale" commitment, if applicable, with a broker-dealer that is a member of the Financial Industry Regulatory Authority (a "FINRA Dealer"), pursuant to this authorization and without further consent, whereby you irrevocably elect to sell a portion of the shares to be delivered in connection with your Restricted Stock Units to satisfy the Withholding Obligation directly to the Company and/or its Affiliates. Unless the Withholding Obligation is satisfied, the Company shall have no obligation to deliver to you any Common Stock or any other consideration pursuant to this Award.
- (c) In the event the Withholding Obligation arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Withholding Obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.
- 12. TAX CONSEQUENCES. The Company has no duty or obligation to minimize the tax consequences to you of this Award and shall not be liable to you for any adverse tax consequences to you arising in connection with this Award. You are hereby advised to consult with your own personal tax, financial and/or legal advisors regarding the tax consequences of this Award and by signing the Grant Notice, you have agreed that you have done so or knowingly and voluntarily declined to do so. You understand that you (and not the Company) shall be responsible for your own tax liability that may arise as a result of this investment or the transactions contemplated by this Agreement.

- **13. UNSECURED OBLIGATION.** Your Award is unfunded, and as a holder of a vested Award, you shall be considered an unsecured creditor of the Company with respect to the Company's obligation, if any, to issue shares or other property pursuant to this Agreement. You shall not have voting or any other rights as a stockholder of the Company with respect to the shares to be issued pursuant to this Agreement until such shares are issued to you pursuant to Section 6 of this Agreement. Upon such issuance, you will obtain full voting and other rights as a stockholder of the Company. Nothing contained in this Agreement, and no action taken pursuant to its provisions, shall create or be construed to create a trust of any kind or a fiduciary relationship between you and the Company or any other person.
- **14. NOTICES.** Any notice or request required or permitted hereunder shall be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five (5) days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this Award by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this Award, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
- **15. HEADINGS.** The headings of the Sections in this Agreement are inserted for convenience only and shall not be deemed to constitute a part of this Agreement or to affect the meaning of this Agreement.

16. MISCELLANEOUS.

- (a) The rights and obligations of the Company under your Award shall be transferable by the Company to any one or more persons or entities, and all covenants and agreements hereunder shall inure to the benefit of, and be enforceable by, the Company's successors and assigns.
- **(b)** You agree upon request to execute any further documents or instruments necessary or desirable in the sole determination of the Company to carry out the purposes or intent of your Award.
- **(c)** You acknowledge and agree that you have reviewed your Award in its entirety, have had an opportunity to obtain the advice of counsel prior to executing and accepting your Award and fully understand all provisions of your Award.
- (d) This Agreement shall be subject to all applicable laws, rules, and regulations, and to such approvals by any governmental agencies or national securities exchanges as may be required.
- **(e)** All obligations of the Company under the Plan and this Agreement shall be binding on any successor to the Company, whether the existence of such successor is the result of a direct or indirect purchase, merger, consolidation, or otherwise, of all or substantially all of the business and/or assets of the Company.
- 17. GOVERNING PLAN DOCUMENT. Your Award is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your Award, and is further subject to all interpretations, amendments, rules and regulations which may from time to time be promulgated and adopted pursuant to the Plan. Your Award (and any compensation paid or shares issued under your Award) is subject to recoupment in accordance with The Dodd–Frank Wall Street Reform and Consumer Protection Act and

any implementing regulations thereunder, any clawback policy adopted by the Company and any compensation recovery policy otherwise required by applicable law. No recovery of compensation under such a clawback policy will be an event giving rise to a right to voluntarily terminate employment upon a resignation for "good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Company.

- **18. EFFECT ON OTHER EMPLOYEE BENEFIT PLANS.** The value of the Award subject to this Agreement shall not be included as compensation, earnings, salaries, or other similar terms used when calculating benefits under any employee benefit plan (other than the Plan) sponsored by the Company or any Affiliate except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any or all of the employee benefit plans of the Company or any Affiliate.
- 19. SEVERABILITY. If all or any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.
- **20. OTHER DOCUMENTS.** You hereby acknowledge receipt or the right to receive a document providing the information required by Rule 428(b) (1) promulgated under the Securities Act. In addition, you acknowledge receipt of the Company's policy permitting certain individuals to sell shares only during certain "window" periods and the Company's insider trading policy, in effect from time to time.
- **21. AMENDMENT.** This Agreement may not be modified, amended or terminated except by an instrument in writing, signed by you and by a duly authorized representative of the Company. Notwithstanding the foregoing, this Agreement may be amended solely by the Board by a writing which specifically states that it is amending this Agreement, so long as a copy of such amendment is delivered to you, and provided that, except as otherwise expressly provided in the Plan, no such amendment materially adversely affecting your rights hereunder may be made without your written consent. Without limiting the foregoing, the Board reserves the right to change, by written notice to you, the provisions of this Agreement in any way it may deem necessary or advisable to carry out the purpose of the Award as a result of any change in applicable laws or regulations or any future law, regulation, ruling, or judicial decision, provided that any such change shall be applicable only to rights relating to that portion of the Award which is then subject to restrictions as provided herein.
- 22. COMPLIANCE WITH SECTION 409A OF THE CODE. This Award is intended to be exempt from the application of Section 409A of the Code, including but not limited to by reason of complying with the "short-term deferral" rule set forth in Treasury Regulation Section 1.409A-1(b)(4) and any ambiguities herein shall be interpreted accordingly. Notwithstanding the foregoing, if it is determined that the Award fails to satisfy the requirements of the short-term deferral rule and is otherwise not exempt from, and determined to be deferred compensation subject to Section 409A of the Code, this Award shall comply with Section 409A to the extent necessary to avoid adverse personal tax consequences and any ambiguities herein shall be interpreted accordingly. If it is determined that the Award is deferred compensation subject to Section 409A and you are a "Specified Employee" (within the meaning set forth in Section 409A(a)(2)(B)(i) of the Code) as of the date of your "Separation from Service" (as defined in Section 409A), then the issuance of any shares that would otherwise be made upon the date of your Separation from Service or within the first six (6) months thereafter will not be made on the originally scheduled date(s) and will instead be issued in a lump sum on the date that is six (6) months

and one day after the date of the Separation from Service, with the balance of the shares issued thereafter in accordance with the original vesting and issuance schedule set forth above, but if and only if such delay in the issuance of the shares is necessary to avoid the imposition of adverse taxation on you in respect of the shares under Section 409A of the Code. Each installment of shares that vests is intended to constitute a "separate payment" for purposes of Treasury Regulation Section 1.409A-2(b)(2).

This Restricted Stock Unit Award Agreement shall be deemed to be signed by the Company and the Participant upon the signing by the Participant of the Restricted Stock Unit Grant Notice to which it is attached.

ATTACHMENT II

2019 EQUITY INCENTIVE PLAN

RAPT THERAPEUTICS, INC.

2019 EMPLOYEE STOCK PURCHASE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: JUNE 27, 2019
APPROVED BY THE STOCKHOLDERS: JULY 18, 2019
IPO DATE: _______, 2019

1. GENERAL; PURPOSE.

- **(a)** The Plan provides a means by which Eligible Employees of the Company and certain designated Related Corporations may be given an opportunity to purchase shares of Common Stock. The Plan permits the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan.
- **(b)** The Company, by means of the Plan, seeks to retain the services of such Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

2. Administration.

- (a) The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).
 - (b) The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:
 - (i) To determine how and when Purchase Rights will be granted and the provisions of each Offering (which need not be identical).
 - (ii) To designate from time to time which Related Corporations of the Company will be eligible to participate in the Plan.
- (iii) To construe and interpret the Plan and Purchase Rights, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it deems necessary or expedient to make the Plan fully effective.
 - (iv) To settle all controversies regarding the Plan and Purchase Rights granted under the Plan.
 - (v) To suspend or terminate the Plan at any time as provided in Section 12.
 - (vi) To amend the Plan at any time as provided in Section 12.

- (vii) Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company and its Related Corporations and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan.
- (viii) To adopt such rules, procedures and sub-plans relating to the operation and administration of the Plan as are necessary or appropriate under applicable local laws, regulations and procedures to permit or facilitate participation in the Plan by Employees who are foreign nationals or employed or located outside the United States.
- (c) The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revest in the Board some or all of the powers previously delegated. Whether or not the Board has delegated administration of the Plan to a Committee, the Board will have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.
- **(d)** All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. SHARES OF COMMON STOCK SUBJECT TO THE PLAN.

- (a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the maximum number of shares of Common Stock that may be issued under the Plan will not exceed 240,336 shares of Common Stock, plus the number of shares of Common Stock that are automatically added on January 1st of each year for a period of up to ten years, commencing on the first January 1 following the year in which the IPO Date occurs and ending on (and including) January 1, 2029, in an amount equal to the lesser of (i) 1% of the total number of shares of Capital Stock outstanding on December 31st of the preceding calendar year, and (ii) 240,336 shares of Common Stock. Notwithstanding the foregoing, the Board may act prior to the first day of any calendar year to provide that there will be no January 1st increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence.
- **(b)** If any Purchase Right granted under the Plan terminates without having been exercised in full, the shares of Common Stock not purchased under such Purchase Right will again become available for issuance under the Plan.
- **(c)** The stock purchasable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

4. GRANT OF PURCHASE RIGHTS; OFFERING.

- (a) The Board may from time to time grant or provide for the grant of Purchase Rights to Eligible Employees under an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering will be in such form and will contain such terms and conditions as the Board will deem appropriate, and will comply with the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights will have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering will include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering will be effective, which period will not exceed 27 months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.
- **(b)** If a Participant has more than one Purchase Right outstanding under the Plan, unless he or she otherwise indicates in forms delivered to the Company: (i) each form will apply to all of his or her Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) will be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) will be exercised.
- (c) The Board will have the discretion to structure an Offering so that if the Fair Market Value of a share of Common Stock on the first Trading Day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then (i) that Offering will terminate immediately as of that first Trading Day, and (ii) the Participants in such terminated Offering will be automatically enrolled in a new Offering beginning on the first Trading Day of such new Purchase Period.

5. Eligibility.

(a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate in accordance with Section 2(b), to Employees of a Related Corporation. Except as provided in Section 5(b), an Employee will not be eligible to be granted Purchase Rights unless, on the Offering Date, the Employee has been in the employ of the Company or the Related Corporation, as the case may be, for such continuous period preceding such Offering Date as the Board may require, but in no event will the required period of continuous employment be equal to or greater than two years. In addition, the Board may (unless prohibited by law) provide that no Employee will be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee's customary employment with the Company or the Related Corporation is more than 20 hours per week and more than five months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code. The Board may also exclude from participation in the Plan or any Offering Employees who are "highly compensated employees" (within the meaning of Section 414(q) of the Code) of the Company or a Related Corporation or a subset of such highly compensated employees.

- **(b)** The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right will thereafter be deemed to be a part of that Offering. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:
- (i) the date on which such Purchase Right is granted will be the "Offering Date" of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;
- (ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of such Offering; and
- (iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, he or she will not receive any Purchase Right under that Offering.
- **(c)** No Employee will be eligible for the grant of any Purchase Rights if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c), the rules of Section 424(d) of the Code will apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options will be treated as stock owned by such Employee.
- (d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee's rights to purchase stock of the Company or any Related Corporation to accrue at a rate which, when aggregated, exceeds US \$25,000 of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, will be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.
- **(e)** Officers of the Company and any designated Related Corporation, if they are otherwise Eligible Employees, will be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may (unless prohibited by law) provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code will not be eligible to participate.

6. PURCHASE RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, will be granted a Purchase Right to purchase up to that number of shares of Common Stock purchasable either with a percentage or with a maximum dollar amount, as designated by the Board, but in either case not exceeding 15% of such Employee's earnings (as defined by the Board in each Offering) during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date will be no later than the end of the Offering.

- **(b)** The Board will establish one or more Purchase Dates during an Offering on which Purchase Rights granted for that Offering will be exercised and shares of Common Stock will be purchased in accordance with such Offering.
- (c) In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering and/or (iii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata (based on each Participant's accumulated Contributions) allocation of the shares of Common Stock (rounded down to the nearest whole share) available will be made in as nearly a uniform manner as will be practicable and equitable.
 - (d) The purchase price of shares of Common Stock acquired pursuant to Purchase Rights will be not less than the lesser of:
 - (i) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the Offering Date; or
 - (ii) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) An Eligible Employee may elect to participate in an Offering and authorize payroll deductions as the means of making Contributions by completing and delivering to the Company, within the time specified in the Offering, an enrollment form provided by the Company. The enrollment form will specify the amount of Contributions not to exceed the maximum amount specified by the Board. Each Participant's Contributions will be credited to a bookkeeping account for such Participant under the Plan and will be deposited with the general funds of the Company except where applicable law or regulations requires that Contributions be deposited with a third party. If permitted in the Offering, a Participant may begin such Contributions with the first payroll occurring on or after the Offering Date (or, in the case of a payroll date that occurs after the end of the prior Offering but before the Offering Date of the next new Offering, Contributions from such payroll will be included in the new Offering). If permitted in the Offering, a Participant may thereafter reduce (including to zero) or increase his or her Contributions. If required under applicable law or regulations or if specifically provided in the Offering, in addition to or instead of making Contributions by payroll deductions, a Participant may make Contributions through the payment by cash, check or wire transfer prior to a Purchase Date.

- **(b)** During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company a withdrawal form provided by the Company. The Company may impose a deadline before a Purchase Date for withdrawing. Upon such withdrawal, such Participant's Purchase Right in that Offering will immediately terminate and the Company will distribute as soon as practicable to such Participant all of his or her accumulated but unused Contributions and such Participant's Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from that Offering will have no effect upon his or her eligibility to participate in any other Offerings under the Plan, but such Participant will be required to deliver a new enrollment form to participate in subsequent Offerings.
- (c) Unless otherwise required by applicable law or regulations, Purchase Rights granted pursuant to any Offering under the Plan will terminate immediately if the Participant either (i) is no longer an Employee for any reason or for no reason (subject to any post-employment participation period required by law) or (ii) is otherwise no longer eligible to participate. The Company will distribute as soon as practicable to such individual all of his or her accumulated but unused Contributions.
- (d) During a Participant's lifetime, Purchase Rights will be exercisable only by such Participant. Purchase Rights are not transferable by a Participant, except by will, by the laws of descent and distribution, or, if permitted by the Company, by a beneficiary designation as described in Section 10.
- **(e)** Unless otherwise specified in the Offering or required by applicable law or regulations, the Company will have no obligation to pay interest on Contributions.

8. Exercise of Purchase Rights.

- **(a)** On each Purchase Date, each Participant's accumulated Contributions will be applied to the purchase of shares of Common Stock, up to the maximum number of shares of Common Stock permitted by the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares will be issued unless specifically provided for in the Offering.
- **(b)** Unless otherwise provided in the Offering, if any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock on the final Purchase Date of an Offering, then such remaining amount will not roll over to the next Offering and will instead be distributed in full to such Participant after the final Purchase Date of such Offering without interest (unless otherwise required by applicable law or regulations).
- **(c)** No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act and the Plan is in material compliance with all applicable federal, state, foreign and other securities and other laws applicable to the Plan. If on a Purchase Date the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights will be exercised on such Purchase Date, and the Purchase Date

will be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date will in no event be more than 27 months from the Offering Date. If, on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in material compliance with all applicable laws and regulations, no Purchase Rights will be exercised and all accumulated but unused Contributions will be distributed to the Participants without interest.

9. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each federal, state, foreign or other regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Purchase Rights and issue and sell shares of Common Stock thereunder unless the Company determines, in its sole discretion, that doing so would cause the Company to incur costs that are unreasonable. If, after commercially reasonable efforts, the Company is unable to obtain the authority that counsel for the Company deems necessary for the grant of Purchase Rights or the lawful issuance and sale of Common Stock under the Plan, and at a commercially reasonable cost, the Company will be relieved from any liability for failure to grant Purchase Rights and/or to issue and sell Common Stock upon exercise of such Purchase Rights.

10. DESIGNATION OF BENEFICIARY.

- (a) The Company may, but is not obligated to, permit a Participant to submit a form designating a beneficiary who will receive any shares of Common Stock and/or Contributions from the Participant's account under the Plan if the Participant dies before such shares and/or Contributions are delivered to the Participant. The Company may, but is not obligated to, permit the Participant to change such designation of beneficiary. Any such designation and/or change must be on a form approved by the Company.
- **(b)** If a Participant dies, and in the absence of a valid beneficiary designation, the Company will deliver any shares of Common Stock and/or Contributions to the executor or administrator of the estate of the Participant. If no executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or Contributions, without interest, to the Participant's spouse, dependents or relatives, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

11. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.

(a) In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iv) the class(es) and number of securities that are the subject of the purchase limits under each ongoing Offering. The Board will make these adjustments, and its determination will be final, binding and conclusive.

(b) In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue outstanding Purchase Rights or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for outstanding Purchase Rights, or (ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for such Purchase Rights, then the Participants' accumulated Contributions will be used to purchase shares of Common Stock (rounded down to the nearest whole share) within ten business days prior to the Corporate Transaction under the outstanding Purchase Rights, and the Purchase Rights will terminate immediately after such purchase.

12. AMENDMENT, TERMINATION OR SUSPENSION OF THE PLAN.

- **(a)** The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization Adjustments, stockholder approval will be required for any amendment of the Plan for which stockholder approval is required by applicable law, regulations or listing requirements.
- **(b)** The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.
- (c) Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan will not be materially impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to comply with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the date the Plan is adopted by the Board, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment. To be clear, the Board may amend outstanding Purchase Rights without a Participant's consent if such amendment is necessary to ensure that the Purchase Right and/or the Plan complies with the requirements of Section 423 of the Code.

13. EFFECTIVE DATE OF PLAN.

The Plan will become effective immediately prior to and contingent upon the IPO Date. No Purchase Rights will be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval must be within 12 months before or after the date the Plan is adopted (or if required under Section 12(a) above, materially amended) by the Board.

14. MISCELLANEOUS PROVISIONS.

- (a) Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights will constitute general funds of the Company.
- **(b)** A Participant will not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until the Participant's shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).

- **(c)** The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering will in any way alter the at will nature of a Participant's employment, if applicable, or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ of the Company or a Related Corporation, or on the part of the Company or a Related Corporation to continue the employment of a Participant.
 - (d) The provisions of the Plan will be governed by the laws of the State of Delaware without resort to that state's conflicts of laws rules.
- **(e)** If any particular provision of the Plan is found to be invalid or otherwise unenforceable, such provision will not affect the other provisions of the Plan, but the Plan will be construed in all respects as if such invalid provision were omitted.
- **(f)** If any provision of the Plan does not comply with applicable law or regulations, such provision shall be construed in such a manner as to comply with applicable law or regulations.

15. Definitions.

As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

- (a) "Board" means the Board of Directors of the Company.
- **(b)** "Capital Stock" means each and every class of common stock of the Company, regardless of the number of votes per share.
- (c) "Capitalization Adjustment" means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Purchase Right after the date the Plan is adopted by the Board without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.
 - (d) "Code" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.
- **(e)** "Committee" means a committee of one or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).

- (f) "Common Stock" means, as of the IPO Date, the common stock of the Company, having one vote per share.
- (g) "Company" means RAPT Therapeutics, Inc., a Delaware corporation.
- (h) "Contributions" means the payroll deductions and other additional payments specifically provided for in the Offering that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into his or her account if specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions
- **(i)** "Corporate Transaction" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:
- (i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;
 - (ii) a sale or other disposition of more than 50% of the outstanding securities of the Company;
 - (iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or
- **(iv)** a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.
 - (j) "Director" means a member of the Board.
- **(k)** "*Eligible Employee*" means an Employee who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.
- (I) "Employee" means any person, including an Officer or Director, who is "employed" for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an "Employee" for purposes of the Plan.
- (m) "Employee Stock Purchase Plan" means a plan that grants Purchase Rights intended to be options issued under an "employee stock purchase plan," as that term is defined in Section 423(b) of the Code.
 - (n) "Exchange Act" means the Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.

- (o) "Fair Market Value" means, as of any date, the value of the Common Stock determined as follows:
- (i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.
- (ii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith in compliance with applicable laws and regulations and in a manner that complies with Sections 409A of the Code
- (iii) Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock on the Offering Date will be the price per share at which shares are first sold to the public in the Company's initial public offering as specified in the final prospectus for that initial public offering.
- **(p)** "*IPO Date*" means the date of the underwriting agreement between the Company and the underwriters managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.
- **(q)** "Offering" means the grant to Eligible Employees of Purchase Rights, with the exercise of those Purchase Rights automatically occurring at the end of one or more Purchase Periods. The terms and conditions of an Offering will generally be set forth in the "Offering Document" approved by the Board for that Offering.
 - **(r)** "Offering Date" means a date selected by the Board for an Offering to commence.
 - (s) "Officer" means a person who is an officer of the Company or a Related Corporation within the meaning of Section 16 of the Exchange Act.
 - (t) "Participant" means an Eligible Employee who holds an outstanding Purchase Right.
 - (u) "Plan" means this RAPT Therapeutics, Inc. 2019 Employee Stock Purchase Plan.
- (v) "Purchase Date" means one or more dates during an Offering selected by the Board on which Purchase Rights will be exercised and on which purchases of Shares of Common Stock will be carried out in accordance with such Offering.
- (w) "Purchase Period" means a period of time specified within an Offering, generally beginning on the Offering Date or on the first Trading Day following a Purchase Date, and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.

- (x) "Purchase Right" means an option to purchase shares of Common Stock granted pursuant to the Plan.
- **(y)** "*Related Corporation*" means any "parent corporation" or "subsidiary corporation" of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.
 - (z) "Securities Act" means the Securities Act of 1933, as amended.
- (aa) "*Trading Day*" means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including but not limited to the NYSE, Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or any successors thereto, is open for trading.

RAPT THERAPEUTICS, INC.

INDEMNITY AGREEMENT

THIS INDEMNITY AGREEMENT (the	"Agreement") is made and entered into as of	between RAPT Therapeutics, Inc., a Delaware
corporation (the "Company"), and	_("Indemnitee").	

RECITALS

- A. Highly competent persons have become more reluctant to serve corporations as directors or officers or in other capacities unless they are provided with adequate protection through insurance or adequate indemnification against inordinate risks of claims and actions against them arising out of their service to and activities on behalf of the corporation;
- B. Although the furnishing of liability insurance to protect persons serving the Company and its subsidiaries from certain liabilities has been a customary and widespread practice among United States-based corporations and other business enterprises, the Company believes that, given current market conditions and trends, such insurance may be available to it in the future only at higher premiums and with more exclusions. At the same time, directors, officers, and other persons in service to corporations or business enterprises are being increasingly subjected to expensive and time-consuming litigation relating to, among other things, matters that traditionally would have been brought only against the Company or business enterprise itself. The Bylaws and Certificate of Incorporation of the Company require indemnification of the officers and directors of the Company. Indemnitee may also be entitled to indemnification pursuant to the General Corporation Law of the State of Delaware ("DGCL"). The Bylaws and Certificate of Incorporation and the DGCL expressly provide that the indemnification provisions set forth therein are not exclusive, and thereby contemplate that contracts may be entered into between the Company and members of the Board (as hereinafter defined), officers and other persons with respect to indemnification;
 - C. The uncertainties relating to liability insurance and to indemnification have increased the difficulty of attracting and retaining such persons;
- D. The Board has determined that the increased difficulty in attracting and retaining such persons is detrimental to the best interests of the Company's stockholders and that the Company should act to assure such persons that there will be increased certainty of such protection in the future;
- E. It is reasonable, prudent and necessary for the Company contractually to obligate itself to indemnify, and to advance expenses on behalf of, such persons to the fullest extent permitted by applicable law so that they will serve or continue to serve the Company free from undue concern that they will not be so indemnified:
- F. This Agreement is a supplement to and in furtherance of the Bylaws and Certificate of Incorporation of the Company and any resolutions adopted pursuant thereto, and shall not be deemed a substitute therefor, nor to diminish or abrogate any rights of Indemnitee thereunder; and
- G. Indemnitee does not regard the protection available under the Company's Bylaws and Certificate of Incorporation and insurance as adequate in the present circumstances, and may not be willing to serve as an officer or director without adequate protection, and the Company desires Indemnitee to serve in such capacity. Indemnitee is willing to serve, continue to serve and to take on additional service for or on behalf of the Company on the condition that he or she be so indemnified;

- H. Indemnitee may have certain rights to indemnification and/or insurance provided by other entities and/or organizations which Indemnitee and such other entities and/or organizations intend to be secondary to the primary obligation of the Company to indemnify Indemnitee as provided herein, with the Company's acknowledgement and agreement to the foregoing being a material condition to Indemnitee's willingness to serve on the Board; and
- I. This Agreement supersedes and replaces in its entirety any previous Indemnification Agreement entered into between the Company and the Indemnitee.

NOW, THEREFORE, in consideration of Indemnitee's agreement to serve as an officer or a director from and after the date hereof, the parties hereto agree as follows:

- 1. <u>Indemnity of Indemnitee</u>. The Company hereby agrees to hold harmless and indemnify Indemnitee to the fullest extent permitted by law, as such may be amended from time to time. In furtherance of the foregoing indemnification, and without limiting the generality thereof:
- (a) Proceedings Other Than Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(a) if, by reason of his Corporate Status (as hereinafter defined), the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding (as hereinafter defined) other than a Proceeding by or in the right of the Company. Pursuant to this Section 1(a), Indemnitee shall be indemnified against all Expenses (as hereinafter defined), judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him, or on his behalf, in connection with such Proceeding or any claim, issue or matter therein, if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal Proceeding, had no reasonable cause to believe the Indemnitee's conduct was unlawful.
- (b) Proceedings by or in the Right of the Company. Indemnitee shall be entitled to the rights of indemnification provided in this Section 1(b) if, by reason of his Corporate Status, the Indemnitee is, or is threatened to be made, a party to or participant in any Proceeding brought by or in the right of the Company. Pursuant to this Section 1(b), Indemnitee shall be indemnified against all Expenses actually and reasonably incurred by the Indemnitee, or on the Indemnitee's behalf, in connection with such Proceeding if the Indemnitee acted in good faith and in a manner the Indemnitee reasonably believed to be in or not opposed to the best interests of the Company; provided, however, if applicable law so provides, no indemnification against such Expenses shall be made in respect of any claim, issue or matter in such Proceeding as to which Indemnitee shall have been adjudged to be liable to the Company unless and to the extent that the Court of Chancery of the State of Delaware shall determine that such indemnification may be made.
- (c) Indemnification for Expenses of a Party Who is Wholly or Partly Successful. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his Corporate Status, a party to and is successful, on the merits or otherwise, in any Proceeding, he shall be indemnified to the maximum extent permitted by law, as such may be amended from time to time, against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith. If Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by him or on his behalf in connection with each successfully resolved claim, issue or matter. For purposes of this Section and without limitation, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

2. Additional Indemnity. In addition to, and without regard to any limitations on, the indemnification provided for in Section 1 of this Agreement, the Company shall and hereby does indemnify and hold harmless Indemnitee against all Expenses, judgments, penalties, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf if, by reason of his Corporate Status, he is, or is threatened to be made, a party to or participant in any Proceeding (including a Proceeding by or in the right of the Company), including, without limitation, all liability arising out of the negligence or active or passive wrongdoing of Indemnitee. The only limitation that shall exist upon the Company's obligations pursuant to this Agreement shall be that the Company shall not be obligated to make any payment to Indemnitee that is finally determined (under the procedures, and subject to the presumptions, set forth in Sections 6 and 7 hereof) to be unlawful.

Contribution.

- (a) Whether or not the indemnification provided in Sections 1 and 2 hereof is available, in respect of any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall pay, in the first instance, the entire amount of any judgment or settlement of such action, suit or proceeding without requiring Indemnitee to contribute to such payment and the Company hereby waives and relinquishes any right of contribution it may have against Indemnitee. The Company shall not enter into any settlement of any action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding) unless such settlement provides for a full and final release of all claims asserted against Indemnitee.
- (b) Without diminishing or impairing the obligations of the Company set forth in the preceding subparagraph, if, for any reason, Indemnitee shall elect or be required to pay all or any portion of any judgment or settlement in any threatened, pending or completed action, suit or proceeding in which the Company is jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), the Company shall contribute to the amount of Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred and paid or payable by Indemnitee in proportion to the relative benefits received by the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, from the transaction from which such action, suit or proceeding arose; provided, however, that the proportion determined on the basis of relative benefit may, to the extent necessary to conform to law, be further adjusted by reference to the relative fault of the Company and all officers, directors or employees of the Company other than Indemnitee who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, in connection with the events that resulted in such expenses, judgments, fines or settlement amounts, as well as any other equitable considerations which the law may require to be considered. The relative fault of the Company and all officers, directors or employees of the Company, other than Indemnitee, who are jointly liable with Indemnitee (or would be if joined in such action, suit or proceeding), on the one hand, and Indemnitee, on the other hand, shall be determined by reference to, among other things, the degree to which their actions were motivated by intent to gain personal profit or advantage, the degree to which their liability is primary or secondary and
- (c) The Company hereby agrees to fully indemnify and hold Indemnitee harmless from any claims of contribution that may be brought by officers, directors or employees of the Company, other than Indemnitee, who may be jointly liable with Indemnitee.
- (d) To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever,

the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such Proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

- 4. <u>Indemnification for Expenses of a Witness</u>. Notwithstanding any other provision of this Agreement, to the extent that Indemnitee is, by reason of his Corporate Status, a witness, or is made (or asked to) respond to discovery requests, in any Proceeding to which Indemnitee is not a party, he shall be indemnified against all Expenses actually and reasonably incurred by him or on his behalf in connection therewith.
- 5. <u>Advancement of Expenses</u>. Notwithstanding any other provision of this Agreement, the Company shall advance all Expenses incurred by or on behalf of Indemnitee in connection with any Proceeding by reason of Indemnitee's Corporate Status within 30 days after the receipt by the Company of a statement or statements from Indemnitee requesting such advance or advances from time to time, whether prior to or after final disposition of such Proceeding. Such statement or statements shall reasonably evidence the Expenses incurred by Indemnitee and shall include or be preceded or accompanied by a written undertaking by or on behalf of Indemnitee to repay any Expenses advanced if it shall ultimately be determined that Indemnitee is not entitled to be indemnified against such Expenses. Any advances and undertakings to repay pursuant to this <u>Section 5</u> shall be unsecured and interest free.
- 6. <u>Procedures and Presumptions for Determination of Entitlement to Indemnification</u>. It is the intent of this Agreement to secure for Indemnitee rights of indemnity that are as favorable as may be permitted under the DGCL and public policy of the State of Delaware. Accordingly, the parties agree that the following procedures and presumptions shall apply in the event of any question as to whether Indemnitee is entitled to indemnification under this Agreement:
- (a) To obtain indemnification under this Agreement, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification. The Secretary of the Company shall, promptly upon receipt of such a request for indemnification, advise the Board in writing that Indemnitee has requested indemnification. Notwithstanding the foregoing, any failure of Indemnitee to provide such a request to the Company, or to provide such a request in a timely fashion, shall not relieve the Company of any liability that it may have to Indemnitee unless, and to the extent that, such failure actually and materially prejudices the interests of the Company.
- (b) Upon written request by Indemnitee for indemnification pursuant to the first sentence of Section 6(a) hereof, a determination with respect to Indemnitee's entitlement thereto shall be made in the specific case by one of the following four methods, which shall be at the election of the Board: (i) unless a Change in Control has occurred: (1) by a majority vote of the Disinterested Directors, even though less than a quorum, (2) by a committee of Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum, (3) if there are no Disinterested Directors or if the Disinterested Directors so direct, by Independent Counsel in a written opinion to the Board, a copy of which shall be delivered to the Indemnitee, or (4) if so directed by the Board, by the stockholders of the Company; and (ii) if a Change in Control has occurred, then by

Independent Counsel in a written opinion to the Board, a copy of which shall be delivered to the Indemnitee. For purposes hereof, Disinterested Directors are those members of the Board who are not parties to the action, suit or proceeding in respect of which indemnification is sought by Indemnitee.

- (c) If the determination of entitlement to indemnification is to be made by Independent Counsel pursuant to Section 6(b) hereof, the Independent Counsel shall be selected as provided in this Section 6(c). The Independent Counsel shall be selected by the Board. Indemnitee may, within 10 days after such written notice of selection shall have been given, deliver to the Company a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not meet the requirements of "Independent Counsel" as defined in Section 13 of this Agreement, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the person so selected shall act as Independent Counsel. If a written objection is made and substantiated, the Independent Counsel selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit. If, within 20 days after submission by Indemnitee of a written request for indemnification pursuant to Section 6(a) hereof, no Independent Counsel shall have been selected and not objected to, either the Company or Indemnitee may petition the Court of Chancery of the State of Delaware or other court of competent jurisdiction for resolution of any objection which shall have been made by the Indemnitee to the Company's selection of Independent Counsel and/or for the appointment as Independent Counsel of a person selected by the court or by such other person as the court shall designate, and the person with respect to whom all objections are so resolved or the person so appointed shall act as Independent Counsel under Section 6(b) hereof. The Company shall pay any and all reasonable fees and expenses of Independent Counsel incurred by such Independent Counsel in connection with acting pursuant to Section 6(b) hereof, and the Company shall pay all reasonable fees and expenses incident to th
- (d) In making a determination with respect to entitlement to indemnification hereunder, the person or persons or entity making such determination shall presume that Indemnitee is entitled to indemnification under this Agreement. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence. Neither the failure of the Company (including by its Board or Independent Counsel) to have made a determination prior to the commencement of any action pursuant to this Agreement that indemnification is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor an actual determination by the Company (including by its Board or Independent Counsel) that Indemnitee has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has not met the applicable standard of conduct.
- (e) Indemnitee shall be deemed to have acted in good faith if Indemnitee's action is based on the records or books of account of the Enterprise, including financial statements, or on information supplied to Indemnitee by the officers of the Enterprise (as hereinafter defined) in the course of their duties, or on the advice of legal counsel for the Enterprise or on information or records given or reports made to the Enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the Enterprise. In addition, the knowledge and/or actions, or failure to act, of any director, officer, agent or employee of the Enterprise shall not be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement. Whether or not the foregoing provisions of this Section 6(e) are satisfied, it shall in any event be presumed that Indemnitee has at all times acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.

- (f) If the person, persons or entity empowered or selected under Section 6 to determine whether Indemnitee is entitled to indemnification shall not have made a determination within 60 days after receipt by the Company of the request therefor, the requisite determination of entitlement to indemnification shall be deemed to have been made and Indemnitee shall be entitled to such indemnification absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a prohibition of such indemnification under applicable law; provided, however, that such 60-day period may be extended for a reasonable time, not to exceed an additional 30 days, if the person, persons or entity making such determination with respect to entitlement to indemnification in good faith requires such additional time to obtain or evaluate documentation and/or information relating thereto; and provided, further, that the foregoing provisions of this Section 6(f) shall not apply if the determination of entitlement to indemnification is to be made by the stockholders pursuant to Section 6(b) of this Agreement and if (A) within 15 days after receipt by the Company of the request for such determination, the Board or the Disinterested Directors, if appropriate, resolve to submit such determination to the stockholders for their consideration at an annual meeting thereof to be held within 75 days after such receipt and such determination is made thereat, or (B) a special meeting of stockholders is called within 15 days after such receipt for the purpose of making such determination, such meeting is held for such purpose within 60 days after having been so called and such determination is made thereat.
- (g) Indemnitee shall cooperate with the person, persons or entity making such determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information which is not privileged or otherwise protected from disclosure and which is reasonably available to Indemnitee and reasonably necessary to such determination. Any Independent Counsel, member of the Board or stockholder of the Company shall act reasonably and in good faith in making a determination regarding the Indemnitee's entitlement to indemnification under this Agreement. Any costs or expenses (including attorneys' fees and disbursements) incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company (irrespective of the determination as to Indemnitee's entitlement to indemnification) and the Company hereby indemnifies and agrees to hold Indemnitee harmless therefrom.
- (h) The Company acknowledges that a settlement or other disposition short of final judgment may be successful if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any action, claim or proceeding to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise in such action, suit or proceeding. Anyone seeking to overcome this presumption shall have the burden of proof and the burden of persuasion by clear and convincing evidence.
- (i) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of nolo contendere or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself adversely affect the right of Indemnitee to indemnification or create a presumption that Indemnitee did not act in good faith and in a manner which he reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his conduct was unlawful.

Remedies of Indemnitee.

- (a) In the event that (i) a determination is made pursuant to Section 6 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 5 of this Agreement, (iii) no determination of entitlement to indemnification is made pursuant to Section 6(b) of this Agreement within 90 days after receipt by the Company of the request for indemnification, (iv) payment of indemnification is not made pursuant to this Agreement within 10 days after receipt by the Company of a written request therefor or (v) payment of indemnification is not made within 10 days after a determination has been made that Indemnitee is entitled to indemnification or such determination is deemed to have been made pursuant to Section 6 of this Agreement, Indemnitee shall be entitled to an adjudication in an appropriate court of the State of Delaware, or in any other court of competent jurisdiction, of Indemnitee's entitlement to such indemnification. Indemnitee shall commence such proceeding seeking an adjudication within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 7(a). The Company shall not oppose Indemnitee's right to seek any such adjudication.
- (b) In the event that a determination shall have been made pursuant to <u>Section 6(b)</u> of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding commenced pursuant to this <u>Section 7</u> shall be conducted in all respects as a de novo trial on the merits, and Indemnitee shall not be prejudiced by reason of the adverse determination under <u>Section 6(b)</u>.
- (c) If a determination shall have been made pursuant to <u>Section 6(b)</u> of this Agreement that Indemnitee is entitled to indemnification, the Company shall be bound by such determination in any judicial proceeding commenced pursuant to this <u>Section 7</u>, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make Indemnitee's misstatement not materially misleading in connection with the application for indemnification, or (ii) a prohibition of such indemnification under applicable law.
- (d) In the event that Indemnitee, pursuant to this Section 7, seeks a judicial adjudication of his rights under, or to recover damages for breach of, this Agreement, or to recover under any directors' and officers' liability insurance policies maintained by the Company, the Company shall pay on his behalf, in advance, any and all expenses (of the types described in the definition of Expenses in Section 13 of this Agreement) actually and reasonably incurred by him in such judicial adjudication, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of expenses or insurance recovery.
- (e) The Company shall be precluded from asserting in any judicial proceeding commenced pursuant to this Section 7 that the procedures and presumptions of this Agreement are not valid, binding and enforceable and shall stipulate in any such court that the Company is bound by all the provisions of this Agreement. The Company shall indemnify Indemnitee against any and all Expenses and, if requested by Indemnitee, shall (within 10 days after receipt by the Company of a written request therefore) advance, to the extent not prohibited by law, such expenses to Indemnitee, which are incurred by Indemnitee in connection with any action brought by Indemnitee for indemnification or advance of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company, regardless of whether Indemnitee ultimately is determined to be entitled to such indemnification, advancement of Expenses or insurance recovery, as the case may be.
- (f) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification under this Agreement shall be required to be made prior to the final disposition of the Proceeding.

- 8. Non-Exclusivity; Survival of Rights; Insurance; Primacy of Indemnification; Subrogation.
- (a) The rights of indemnification as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Certificate of Incorporation, the Bylaws, any agreement, a vote of stockholders, a resolution of Board or otherwise. No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his Corporate Status prior to such amendment, alteration or repeal. To the extent that a change in the DGCL, whether by statute or judicial decision, permits greater indemnification than would be afforded currently under the Certificate of Incorporation, Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.
- (b) To the extent that the Company maintains an insurance policy or policies providing liability insurance for directors, officers, employees, or agents or fiduciaries of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person serves at the request of the Company, Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any director, officer, employee, agent or fiduciary under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has director and officer liability insurance in effect, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of the Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.
- (c) The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary and any obligation of the Secondary Indemnitors (as hereinafter defined) to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all Expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the Certificate of Incorporation or Bylaws of the Company (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Secondary Indemnitors, and, (iii) that it irrevocably waives, relinquishes and releases the Secondary Indemnitors from any and all claims against the Secondary Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Secondary Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Secondary Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Secondary Indemnitors are express third party beneficiaries of the terms of this Section 8(c).
- (d) Except as provided in paragraph (c) above, in the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee (other than against the Secondary Indemnitors), who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

(e)	Except as provided in paragraph (c) above, the Company shall not be liable under this Agreement to make any payment of
amounts otherwise indemn	ifiable hereunder if and to the extent that Indemnitee has otherwise actually received such payment under any insurance
policy, contract, agreement	or otherwise.

- (f) Except as provided in paragraph (c) above, the Company's obligation to indemnify or advance Expenses hereunder to Indemnitee who is or was serving at the request of the Company as a director, officer, employee or agent of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise shall be reduced by any amount Indemnitee has actually received as indemnification or advancement of expenses from such other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise.
- 9. <u>Exception to Right of Indemnification</u>. Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any claim made against Indemnitee:
- (a) for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or other indemnity provision, provided, that the foregoing shall not affect the rights of Indemnitee or the Secondary Indemnitors set forth in Section 8(c) above;
- (b) for an accounting of profits made from the purchase and sale (or sale and purchase) by Indemnitee of securities of the Company within the meaning of Section 16(b) of the Exchange Act, or similar provisions of state statutory law or common law;
- (c) in connection with any Proceeding (or any part of any Proceeding) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees or other indemnitees, unless (i) the Board authorized the Proceeding (or any part of any Proceeding) prior to its initiation or (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law;
- (d) with respect to remuneration paid to Indemnitee if it is determined by final judgment or other final adjudication that such remuneration was in violation of law (and, in this respect, both the Company and Indemnitee have been advised that the Securities and Exchange Commission believes that indemnification for liabilities arising under the federal securities laws is against public policy and is, therefore, unenforceable and that claims for indemnification should be submitted to appropriate courts for adjudication, as indicated in the last paragraph of this Section 9 below);
- (e) a final judgment or other final adjudication is made that Indemnitee's conduct was in bad faith, knowingly fraudulent or deliberately dishonest or constituted willful misconduct (but only to the extent of such specific determination);
- (f) in connection with any claim for reimbursement of the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Exchange Act (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act, or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act), if Indemnitee is held liable therefor (including pursuant to any settlement); or

(g) on account of conduct that is established by a final judgment as constituting a breach of Indemnitee's duty of loyalty to the Company or resulting in any personal profit or advantage to which Indemnitee is not legally entitled.

For purposes of this <u>Section 9</u>, a final judgment or other adjudication may be reached in either the underlying proceeding or action in connection with which indemnification is sought or a separate proceeding or action to establish rights and liabilities under this Agreement.

Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee or otherwise act in violation of any undertaking appearing in and required by the rules and regulations promulgated under the Securities Act, or in any registration statement filed with the SEC under the Securities Act. Indemnitee acknowledges that paragraph (h) of Item 512 of Regulation S-K currently generally requires the Company to undertake in connection with any registration statement filed under the Securities Act to submit the issue of the enforceability of Indemnitee's rights under this Agreement in connection with any liability under the Securities Act on public policy grounds to a court of appropriate jurisdiction and to be governed by any final adjudication of such issue. Indemnitee specifically agrees that any such undertaking shall supersede the provisions of this Agreement and to be bound by any such undertaking.

<u>Duration of Agreement</u>. All agreements and obligations of the Company contained herein shall continue during the period Indemnitee is an officer or director of the Company (or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise) and shall continue thereafter so long as Indemnitee shall be subject to any Proceeding (or any proceeding commenced under <u>Section 7</u> hereof) by reason of his Corporate Status, whether or not he is acting or serving in any such capacity at the time any liability or expense is incurred for which indemnification can be provided under this Agreement. This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company), assigns, spouses, heirs, executors and personal and legal representatives.

10. <u>Security.</u> To the extent requested by Indemnitee and approved by the Board, the Company may at any time and from time to time provide security to Indemnitee for the Company's obligations hereunder through an irrevocable bank line of credit, funded trust or other collateral. Any such security, once provided to Indemnitee, may not be revoked or released without the prior written consent of the Indemnitee.

11. <u>Enforcement</u>.

- (a) The Company expressly confirms and agrees that it has entered into this Agreement and assumes the obligations imposed on it hereby in order to induce Indemnitee to serve as an officer or director of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as an officer or director of the Company.
- (b) This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

- 12. Definitions. For purposes of this Agreement:
- (a) "Beneficial Owner" has the meaning given to such term in Rule 13d-3 under the Exchange Act; provided, however, that Beneficial Owner excludes any Person otherwise becoming a Beneficial Owner by reason of the stockholders of the Company approving a merger of the Company with another entity.
 - (b) "*Board*" means the Board of Directors of the Company.
 - (c) "Change in Control" means the earliest to occur after the date of this Agreement of any of the following events:
 - (i) Acquisition of Stock by Third Party. Any Person is or becomes the Beneficial Owner (as defined above), directly or indirectly, of securities of the Company representing 25% or more of the combined voting power of the Company's then outstanding securities;
 - (ii) Change in Board. During any period of two consecutive years (not including any period prior to the execution of this Agreement), individuals who at the beginning of such period constitute the Board, and any new director (other than a director designated by a person who has entered into an agreement with the Company to effect a transaction described in clause (i), (ii) or (iv) of this definition of Change in control) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved, cease for any reason to constitute a least a majority of the members of the Board;
 - (iii) Corporate Transactions. The effective date of a merger or consolidation of the Company with any other entity, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) more than 51% of the combined voting power of the voting securities of the surviving entity outstanding immediately after such merger or consolidation and with the power to elect at least a majority of the Board or other governing body of such surviving entity;
 - (iv) Liquidation. The approval by the stockholders of the Company of a complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets; and
 - (v) Other Events. There occurs any other event of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A (or a response to any similar item on any similar schedule or form) promulgated under the Exchange Act, whether or not the Company is then subject to such reporting requirement.
- (d) "Corporate Status" means the status of a person who is or was a director, officer, employee, agent or fiduciary of the Company or of any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that such person is or was serving at the express written request of the Company.
 - (e) "*Delaware Court*" means the Chancery Court of the State of Delaware.

- (f) "Disinterested Director" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.
- (g) "Enterprise" means the Company and any other corporation, partnership, joint venture, trust, employee benefit plan or other enterprise that Indemnitee is or was serving at the express written request of the Company as a director, officer, employee, agent or fiduciary.
 - (h) "*Exchange Act*" means the Securities Exchange Act of 1934, as amended.
- (i) "Expenses" means all reasonable attorneys' fees, retainers, court costs, transcript costs, fees of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees and all other disbursements or expenses of the types customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, participating, or being or preparing to be a witness in a Proceeding, or responding to, or objecting to, a request to provide discovery in any Proceeding. Expenses also means expenses incurred in connection with any appeal resulting from any Proceeding and any federal, state, local or foreign taxes imposed on the Indemnitee as a result of the actual or deemed receipt of any payments under this Agreement, including without limitation the premium, security for, and other costs relating to any cost bond, supersede as bond, or other appeal bond or its equivalent. Expenses, however, does not mean amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.
- (j) "Independent Counsel" means a law firm, or a member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party (other than with respect to matters concerning Indemnitee under this Agreement, or of other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" does not mean any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement. The Company agrees to pay the reasonable fees of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.
- (k) "Person" for purposes of the definition of Beneficial Owner and Change in Control set forth above, has the meaning as set forth in Sections 13(d) and 14(d) of the Exchange Act; provided, however, that Person excludes (i) the Company, (ii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company, and (iii) any corporation owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company.
- (l) "Proceeding" means any threatened, pending or completed action, suit, arbitration, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or any other actual, threatened or completed proceeding, whether brought by or in the right of the Company or otherwise and whether civil, criminal, administrative or investigative, in which Indemnitee was, is or will be involved as a party or otherwise, by reason of the fact that Indemnitee is or was an officer or director of the Company, by reason of any action taken by him or of any inaction on his part while acting as an officer or director of the Company, or by reason of the fact that he is or was serving at the request of the Company as a director, officer, employee, agent or fiduciary of another corporation, partnership, joint venture, trust or other Enterprise; in each case whether or not he is acting or serving in any such capacity

at the time any liability or expense is incurred for which indemnification can be provided under this Agreement; including one pending on or before the date of this Agreement, but excluding one initiated by an Indemnitee pursuant to <u>Section 7</u> of this Agreement to enforce his rights under this Agreement.

- (m) "Sarbanes-Oxley Act" shall mean the Sarbanes-Oxley Act of 2002, as amended.
- (n) "Securities Act" means the Securities Act of 1933, as amended.
- (o) "Secondary Indemnitors" shall mean other entities and/or organizations through which the Indemnitee has or may have in the future certain rights to indemnification, advancement of expenses and/or insurance.
- 13. <u>Severability</u>. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision. Without limiting the generality of the foregoing, this Agreement is intended to confer upon Indemnitee indemnification rights to the fullest extent permitted by applicable laws. In the event any provision hereof conflicts with any applicable law, such provision shall be deemed modified, consistent with the aforementioned intent, to the extent necessary to resolve such conflict.
- 14. <u>Modification and Waiver</u>. No supplement, modification, termination or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.
- 15. <u>Notice By Indemnitee</u>. Indemnitee agrees promptly to notify the Company in writing upon being served with or otherwise receiving any summons, citation, subpoena, complaint, indictment, information or other document relating to any Proceeding or matter that may be subject to indemnification covered hereunder. The failure to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnitee under this Agreement or otherwise unless and only to the extent that such failure or delay materially prejudices the Company.
- 16. Notices. All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by confirmed electronic mail or facsimile if sent during normal business hours of the recipient, and if not so confirmed, then on the next business day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent:
 - (a) To Indemnitee at the address set forth below Indemnitee signature hereto.
 - (b) To the Company at:

RAPT Therapeutics, Inc.
561 Eccles Avenue
South San Francisco, CA 94080
Attention: Brian Wood, Precident and Chief Evecutive

Attention: Brian Wong, President and Chief Executive Officer

or to such other address as may have been furnished to Indemnitee by the Company or to the Company by Indemnitee, as the case may be.

- 17. <u>Counterparts</u>. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.
- 18. <u>Headings</u>. The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.
- 19. Governing Law and Consent to Jurisdiction. This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. The Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, irrevocably Corporation Service Company as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on and as of the day and year first above written.

By:
INDEMNITEE
Name:
Address:

RAPT THERAPEUTICS, INC.

COMPANY

[Signature Page to Indemnity Agreement]

July 20, 2019

Brian Wong

Dear Brian,

This letter agreement (the "Agreement") sets forth the terms and conditions of your continued employment with RAPT Therapeutics, Inc. ("RAPT" or the "Company"). This Agreement supersedes and replaces all prior written employment agreements, offer letters, or oral promises regarding the subject matter herein, including, but not limited to, your initial July 14, 2015 offer letter agreement with the Company and your offer letter amendment dated March 1, 2018.

- 1. **Position; Location.** You will continue to serve as the Company's President, Chief Executive Officer and Director and will be responsible for such duties as are assigned to you by the Company's Board of Directors (the "**Board**"). This position is full-time. As an exempt salaried employee, you are expected to work the Company's normal business hours as well as additional hours as required by the nature of your work assignments, and will not be eligible for overtime compensation. You will continue to work out of RAPT's offices located at 561 Eccles Avenue, South San Francisco, CA 94080. Of course, the Company may change your position, duties, and work location from time to time in its discretion.
- **2. CIIAA; Company Policies.** You are required to continue to abide by the terms of the confidential information and inventions assignment agreement (the "**CIIAA**") that you previously executed. In addition, you must continue to comply with Company's personnel policies and procedures as they may be interpreted, adopted or revised from time to time in the Company's sole discretion.
- **3. Base Salary.** You will continue to receive an annualized base salary of \$440,000, subject to deductions for taxes and other withholdings as required by law, and payable in accordance with RAPT's payroll cycle; provided, however, that contingent upon and effective as of the closing of the Company's initial public offering, your annualized base salary will be increased to \$484,000.
- **4. Annual Bonus.** You will continue to be eligible for an annual (calendar year) discretionary bonus, with a target amount equal to 40% of your annual base salary, contingent upon achievement, in the Company's sole discretion, of individual and corporate performance objectives established by the Company, as well as any other criteria the Company deems relevant (the "**Annual Bonus**"); provided, however, that contingent upon and effective as of the closing of the Company's initial public offering, the target amount of your Annual Bonus will be increased to 50% of your annual base salary. To receive payment of any Annual Bonus, you must be employed by the Company through the date of payment of the Annual Bonus. Any Annual Bonus will not be earned until paid and will be paid on or before March 15 of the year following the year to which the Annual Bonus relates. If your employment terminates for any reason prior to the payment date of the Annual Bonus, you will not have earned, and will not be paid, any pro-rated Annual Bonus.

- **5. Equity.** Your existing equity awards will continue to be governed by the terms of the applicable plan documents, grant notices and equity agreements. In addition, you shall continue to be eligible for further equity awards from time to time as determined by the Board in its sole discretion.
- **6. Benefits.** During your employment, you shall continue to be eligible to participate in the employee benefit plans maintained by RAPT as are in effect from time to time and generally available to similarly situated RAPT employees, subject in each case to the generally applicable terms and conditions of the plan in question and Company policies. In addition, you will continue to be eligible for paid time off consistent with applicable law and the RAPT policy generally applicable to similarly situated RAPT employees. Any benefits offered by RAPT are subject to change without notice at the sole discretion of RAPT.

7. Termination of Employment; Severance.

- (a) At-Will Status. The Company and you understand and agree that your employment relationship is at-will. Accordingly, there are no promises or representations concerning the duration of your employment relationship, which may be terminated by either you or Company at any time, with or without Cause (as defined herein) or Good Reason (as defined herein), and with or without advance notice. Your at-will status cannot be altered except in an express written agreement signed by you and the Company with specific written approval of the Board.
- **(b) Resignation by You.** You may resign from the Company with or without Good Reason. You agree to provide at least three (3) weeks advance written notice of a resignation without Good Reason, to allow for an orderly transition. The Company may accelerate the date your resignation is to become effective, in its sole discretion.
- (c) Final Pay upon Termination for Any Reason. Except as otherwise provided by this Agreement and/or required by law, upon termination of your employment for any reason, the Company's obligation to make payments hereunder shall cease, except that the Company shall pay all amounts due and payable for your services through your last day of employment (the "Separation Date"), including all accrued unpaid base salary earned through the Separation Date, any benefits accrued prior to the Separation Date, all accrued but unused vacation as of the Separation Date, and any reimbursable business expenses incurred but unreimbursed as of the Separation Date.
- **(d) Severance Benefits Unrelated to a Change in Control.** If your employment is terminated by the Company without Cause (and not due to your death or disability), or due to your resignation for Good Reason, in either case not within the twelve (12) month period following the effective date of a Change in Control (as defined herein), then subject to the preconditions set forth below in Section 7(f), you shall be eligible to receive the following severance benefits:
- (i) Payment of severance equal to twelve (12) months of your base salary in effect immediately prior to the Separation Date (or, the level in effect prior to any reduction of base salary that constitutes Good Reason), less applicable payroll tax withholdings and deductions, to be paid in the form of salary continuation beginning on the first regularly scheduled payroll date of the Company following the 60th day following your Separation from Service (as defined herein).

- (ii) In addition, provided you timely elect to continue your group health insurance coverage after the Separation Date pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended or any state law of similar effect (collectively, "COBRA"), the Company will reimburse the monthly COBRA premiums (the "COBRA Payments") you pay to continue your health insurance coverage (including dependent coverage) under COBRA until the earlier of (A) a period of twelve (12) months after the Separation Date, (B) the date you become eligible for group health insurance coverage through a new employer or (C) the date you cease to be eligible for COBRA coverage (the "COBRA Payment Period"). You must submit to the Company appropriate documentation of the foregoing health insurance payments, within sixty (60) days of making such payments, in order to be reimbursed. Notwithstanding the foregoing, if the Company determines, in its sole discretion, that it cannot pay the COBRA Payments without a substantial risk of violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), at the end of each remaining month of the COBRA Payment Period, the Company shall pay you directly a taxable monthly amount which, after taxes, equals the COBRA Payment amount the Company would have otherwise paid to you. You agree to promptly notify the Company in writing if you become eligible for group health insurance coverage through a new employer before the end of the COBRA Payment Period.
- **(e)** Change in Control Termination. If your employment is terminated by the Company without Cause (but not due to your death or Disability), or you resign for Good Reason, and in either case such termination or resignation occurs within twelve (12) months after the effective date of a Change in Control (as defined below), then subject to the preconditions set forth below in Section 7(f), you shall be eligible to receive the following severance benefits:
- (i) Payment of severance equal to eighteen (18) months of your base salary in effect immediately prior to the Separation Date (or, the level in effect prior to any reduction of base salary that constitutes Good Reason), less applicable payroll tax withholdings and deductions, to be paid in the form of salary continuation beginning on the first regularly scheduled payroll date of the Company following the 60th day following your Separation from Service;
- (ii) Accelerated vesting of your equity awards so that you become one hundred percent (100%) vested in all such equity awards (unless otherwise specified in the applicable equity award agreement governing the applicable award);
- (iii) A lump sum cash payment equal to your target Annual Bonus less deductions and withholdings, to be paid on the first regularly scheduled payroll date of the Company following the 60th day following your Separation from Service); and

- (iv) Provided you timely elect to continue your group health insurance coverage after the Separation Date pursuant to COBRA, the Company will reimburse the COBRA Payments you pay to continue your health insurance coverage (including dependent coverage) under COBRA until the earlier of (A) a period of eighteen (18) months after the Separation Date, (B) the date you become eligible for group health insurance coverage through a new employer or (C) the date you cease to be eligible for COBRA coverage (the "CIC COBRA Payment Period"). You must submit to the Company appropriate documentation of the foregoing health insurance payments, within sixty (60) days of making such payments, in order to be reimbursed. Notwithstanding the foregoing, if the Company determines, in its sole discretion, that it cannot pay the COBRA Payments without a substantial risk of violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), at the end of each remaining month of the CIC COBRA Payment Period, the Company shall pay you directly a taxable monthly amount which, after taxes, equals the COBRA Payment amount the Company would have otherwise paid to you. You agree to promptly notify the Company in writing if you become eligible for group health insurance coverage through a new employer before the end of the CIC COBRA Payment Period.
- **(f) Preconditions.** As a precondition to receiving any severance benefits under this Agreement, you must (i) remain in compliance with all continuing obligations you owe to the Company, including those under this Agreement and your CIIAA, and (ii) within twenty-one (21) days after the Separation Date (or forty-five (45) days after the Separation Date, in the event of a group reduction-in-force), you must timely sign and return to the Company a release of claims in a form acceptable to the Company and allow the release to become fully-effective and non-revocable by its terms.
- **(g) Prior CIC Benefits.** You and the Company hereby acknowledge and agree that: (i) this Agreement supersedes in its entirety any agreement, plan, or portion thereof pursuant to which you are or were entitled to any benefits in the event of a Change in Control, such that the parties' rights and obligations under any such prior agreement, plan, or portion thereof are null and void; and (ii) the severance benefits described in Section 6(e) are the sole benefits to which you shall be entitled in the event of a separation following a Change in Control.

8. Definitions.

(a) Cause. For purposes of this Agreement, "Cause," as determined by the Board acting in good faith and based on information then known to it, means: (i) your conviction (including a guilty plea or a no contest plea) of a felony, or of any other crime involving fraud, dishonesty or moral turpitude; (ii) your attempted commission of or participation in a fraud or act of material dishonesty against the Company; (iii) your material breach of any written agreement between you and the Company (including but not limited to your CIIAA) or material breach or material neglect of any statutory or fiduciary duty you owe to the Company as reasonably determined by the Company's Chief Executive Officer and the Board, in each case, after having provided you with not less than 30 days written notice of same and with the opportunity to cure of the same duration to the extent curable; or (iv) your conduct that constitutes gross insubordination, incompetence or habitual neglect of your duties as reasonably determined by the Board, in each case, after having provided you with not less than 30 days written notice of same and with the opportunity to cure of the same duration to the extent curable.

- **(b) Good Reason.** For purposes of this Agreement, "**Good Reason**" for your resignation of your employment will exist following the occurrence of any of the following without your written consent: (i) a material reduction in your duties (including responsibilities and/or authorities), provided, however, that a change in job position (including a change in title) shall not be deemed a "material reduction" in and of itself unless your new duties are substantially reduced from the prior duties; (ii) relocation of your principal place of employment to a place that increases your one-way commute by more than seventy five (75) miles as compared to your then current principal place of employment immediately prior to such relocation; or (iii) a reduction of at least 10% of your base salary or base compensation (unless pursuant to a salary or base compensation reduction program applicable generally to the Company's key employees), which percentage the parties agree is a "material" reduction; provided, however, that in order to resign for Good Reason, you must (1) provide written notice to the Company within 30 days after the first occurrence of the event giving rise to Good Reason setting forth the basis for your resignation, (2) allow the Company at least 30 days from receipt of such written notice to cure such event, and (3) if such event is not reasonably cured within such period, your resignation from all positions you then hold with the Company is effective not later than 90 days after the expiration of the cure period.
- (c) Change in Control. For purposes of this Agreement, "Change in Control" means: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions to which the Company is party (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any sale of stock for capital raising purposes) other than a transaction or series of transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Company held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, lease or other conveyance of all or substantially all of the assets of the Company, in each case, only to the extent such event also constitutes a "change in ownership" of the Company or a "change in the ownership of a substantial portion of the Company's assets" for purposes of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), if required for compliance with Section 409A of the Code.

9. Code Section 409A Compliance.

- (a) Notwithstanding anything set forth in this Agreement to the contrary, any payments and benefits provided pursuant to this Agreement which constitute "deferred compensation" within the meaning of the Treasury Regulations issued pursuant to Section 409A of the Code shall not commence until you have incurred a "separation from service" (as such term is defined in the Treasury Regulation Section 1.409A-1(h) ("Separation From Service"), unless the Company reasonably determines that such amounts may be provided to you without causing you to incur the additional 20% tax under Section 409A.
- **(b)** For the avoidance of doubt, it is intended that the payments and benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5)

and 1.409A-1(b)(9) and this Agreement will be construed to the greatest extent possible as consistent with those provisions. To the extent not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A and incorporates by reference all required definitions and payment terms. For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulation Section 1.409A 2(b)(2)(iii)), your right to receive any installment payments under this Agreement (whether severance payments, reimbursements or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. Notwithstanding any provision to the contrary in this Agreement, if the Company (or, if applicable, the successor entity thereto) determines that any payments upon your Separation From Service set forth herein and/or under any other agreement with the Company constitute "deferred compensation" under Section 409A and you are, on your Separation From Service, a "specified employee" of the Company or any successor entity thereto, as such term is defined in Section 409A(a)(2)(B)(i) of the Code, then, solely, to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the payments upon your Separation From Service shall be delayed until the earlier to occur of: (a) the date that is six months and one day after your Separation From Service or (b) the date of your death (such applicable date, the "Specified Employee Initial Payment Date"). On the Specified Employee Initial Payment Date, the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the payments upon your Separation From Service that you would otherwise have received through the Specified Employee Initial Payment Date if the commencement of the payment of the severance benefits had not been so delayed pursuant to this section and (B) commence paying the balance of the severance benefits in accordance with the applicable payment schedules set forth in this Agreement.

10. 280G.

- (a) If any payment or benefit that you will or may receive from the Company or otherwise (a "280G Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then any such 280G Payment will be equal to the Reduced Amount. The "Reduced Amount" will be either (x) the largest portion of the 280G Payment that would result in no portion of the 280G Payment (after reduction) being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the 280G Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the 280G Payment may be subject to the Excise Tax. If a reduction in a 280G Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction will occur in the manner (the "Reduction Method") that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the "Pro Rata Reduction Method").
- **(b)** Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the 280G Payment being subject to taxes pursuant

to Section 409A of the Code that would not otherwise be subject to taxes pursuant to Section 409A of the Code, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, will be modified so as to avoid the imposition of taxes pursuant to Section 409A of the Code as follows: (A) as a first priority, the modification will preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (B) as a second priority, 280G Payments that are contingent on future events (e.g., being terminated without Cause), will be reduced (or eliminated) before 280G Payments that are not contingent on future events; and (C) as a third priority, 280G Payments that are "deferred compensation" within the meaning of Section 409A of the Code will be reduced (or eliminated) before 280G Payments that are not "deferred compensation" within the meaning of Section 409A of the Code.

- **(c)** If Section 280G of the Code is not applicable by law to you, the Company will determine whether any similar law in your jurisdiction applies and should be taken into account.
- (d) The independent professional firm engaged by the Company for general tax audit purposes as of the day prior to the effective date of the Change in Control will make all determinations required to be made under this Section. If the firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control, the Company will appoint a nationally recognized independent professional firm to make the determinations required hereunder. The Company will bear all expenses with respect to the determinations by such firm required to be made hereunder. The Company will use commercially reasonable efforts to cause the firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to the Company and you within thirty (30) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by the Company or you) or such other time as requested by the Company or you.
- **(e)** If you receive a 280G Payment for which the Reduced Amount was determined pursuant to clause (x) of the first paragraph of this Section and the Internal Revenue Service determines thereafter that some portion of the 280G Payment is subject to the Excise Tax, you will promptly return to the Company a sufficient amount of the 280G Payment (after reduction pursuant to clause (x) of the first paragraph of this Section) so that no portion of the remaining 280G Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of the first paragraph of this Section, you will have no obligation to return any portion of the 280G Payment pursuant to the preceding sentence.
- 11. Conflicts. You agree that while employed by the Company you will not engage in any other employment, consulting or other business that would interfere with your duties to the Company or create a conflict of interest. You specifically warrant that you are not subject to an employment agreement or restrictive covenant preventing full performance of your duties to the Company. You agree not to bring to the Company or use in the performance of your responsibilities at the Company any materials or documents of a former employer that are not generally available to the public, unless you have obtained express written authorization from the former employer for their possession and use. You also agree to honor all obligations to former employers during your employment with the Company.

- **12. Outside Activities.** You agree to devote such of your business time, energy, and skill to the affairs of the Company and its subsidiaries as shall be necessary to perform the duties of such positions; *provided*, *however*, that you may engage in civic and not-for-profit activities (*e.g.* charitable and industry association activities) so long as such activities do not materially interfere with your obligations to the Company or create a conflict of interest. You further agree that if, during the term of your relationship with the Company, you wish to perform any consulting or outside activities for any business or for-profit entities, including serving on any advisory boards or boards of director of for-profit entities, any such additional activities shall require the Company's prior written consent.
- 13. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with the Company, or the termination of your employment, shall be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. § 1-16, to the fullest extent permitted by law, by final, binding and confidential arbitration conducted by JAMS or its successor, under JAMS' then applicable rules and procedures for employment disputes before a single arbitrator (available upon request and also currently available at http://www.jamsadr.com/rules-employment-arbitration/). You acknowledge that by agreeing to this arbitration procedure, both you and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding. In addition, all claims, disputes, or causes of action under this section, whether by you or the Company, must be brought in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The arbitrator may not consolidate the claims of more than one person or entity, and may not preside over any form of representative or class proceeding. To the extent that the preceding sentences regarding class claims or proceedings are found to violate applicable law or are otherwise found unenforceable, any claim(s) alleged or brought on behalf of a class shall proceed in a court of law rather than by arbitration. This paragraph shall not apply to any action or claim that cannot be subject to mandatory arbitration as a matter of law, including, without limitation, claims brought pursuant to the California Private Attorneys General Act of 2004, as amended, to the extent such claims are not permitted by applicable law to be submitted to mandatory arbitration (collectively, the "Excluded Claims"). In the event you intend to bring multiple claims, including one of the Excluded Claims listed above, the Excluded Claims may be publicly filed with a court, while any other claims will remain subject to mandatory arbitration. You will have the right to be represented by legal counsel at any arbitration proceeding. Questions of whether a claim is subject to arbitration under this agreement shall be decided by the arbitrator. Likewise, procedural questions which grow out of the dispute and bear on the final disposition are also matters for the arbitrator. The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written statement signed by the arbitrator regarding the disposition of each claim and the relief, if any, awarded as to each claim, the reasons for the award, and the arbitrator's essential findings and conclusions on which the award is based. The arbitrator shall be authorized to award all relief that you or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS arbitration fees in excess of the administrative fees that you would be required to pay if the dispute were decided in a court of law. Nothing in this Agreement is

intended to prevent either you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

14. Miscellaneous. This Agreement, together with its exhibits and any documentation related to your equity interests, forms the complete and exclusive statement of your employment agreement with the Company. It supersedes any other agreements or promises made to you by anyone, whether oral or written. Except for terms reserved to the Company's discretion, no term or provision of this Agreement may be amended waived, released, discharged or modified except in writing, signed by you and an authorized officer of the Company. This Agreement will be governed by the laws of California. If any provision of this Agreement is determined to be invalid or unenforceable, in whole or in part, this determination shall not affect any other provision of this offer letter agreement and the provision in question shall be modified so as to be rendered enforceable in a manner consistent with the intent of the parties insofar as possible under applicable law. This Agreement may be delivered and executed via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and shall be deemed to have been duly and validly delivered and executed and be valid and effective for all purposes.

If you are in agreement with the terms set forth above, please sign below and return the signed Agreement.

Sincerely,		
/s/ William Rieflin William Rieflin, Chair of the Board		
Understood and Accepted:		
/s/ Brian Wong Brian Wong	July 20, 2019 Date	

July 20, 2019

William Ho

Dear William.

This letter agreement (the "**Agreement**") sets forth the terms and conditions of your continued employment with RAPT Therapeutics, Inc. ("**RAPT**" or the "**Company**"). This Agreement supersedes and replaces all prior written employment agreements, offer letters, or oral promises regarding the subject matter herein, including, but not limited to, your initial May 4, 2015 offer letter agreement with the Company, your May 26, 2016 change in control agreement and your March 1, 2018 change in control amendment agreement.

- 1. **Position; Location.** You will continue to serve as the Company's Chief Medical Officer and will be responsible for such duties as are assigned to you by the Company's Board of Directors (the "**Board**") or Chief Executive Officer. This position is full-time. As an exempt salaried employee, you are expected to work the Company's normal business hours as well as additional hours as required by the nature of your work assignments, and will not be eligible for overtime compensation. You will continue to work out of RAPT's offices located at 561 Eccles Avenue, South San Francisco, CA 94080. Of course, the Company may change your position, duties, and work location from time to time in its discretion.
- **2. CIIAA; Company Policies.** You are required to continue to abide by the terms of the confidential information and inventions assignment agreement (the "**CIIAA**") that you previously executed. In addition, you must continue to comply with Company's personnel policies and procedures as they may be interpreted, adopted or revised from time to time in the Company's sole discretion.
- **3. Base Salary.** You will continue to receive an annualized base salary of \$360,500, subject to deductions for taxes and other withholdings as required by law, and payable in accordance with RAPT's payroll cycle; provided, however, that contingent upon and effective as of the closing of the Company's initial public offering, your annualized base salary will be increased to \$385,000.
- **4. Annual Bonus.** You will continue to be eligible for an annual (calendar year) discretionary bonus, with a target amount equal to 30% of your annual base salary, contingent upon achievement, in the Company's sole discretion, of individual and corporate performance objectives established by the Company, as well as any other criteria the Company deems relevant (the "**Annual Bonus**"); provided, however, that contingent upon and effective as of the closing of the Company's initial public offering, the target amount of your Annual Bonus will be increased to 40% of your annual base salary. To receive payment of any Annual Bonus, you must be employed by the Company through the date of payment of the Annual Bonus. Any Annual Bonus will not be earned until paid and will be paid on or before March 15 of the year following the year to which the Annual Bonus relates. If your employment terminates for any reason prior to the payment date of the Annual Bonus, you will not have earned, and will not be paid, any pro-rated Annual Bonus.

- 5. **Equity.** Your existing equity awards will continue to be governed by the terms of the applicable plan documents, grant notices and equity agreements. In addition, you shall continue to be eligible for further equity awards from time to time as determined by the Board in its sole discretion.
- **6. Benefits.** During your employment, you shall continue to be eligible to participate in the employee benefit plans maintained by RAPT as are in effect from time to time and generally available to similarly situated RAPT employees, subject in each case to the generally applicable terms and conditions of the plan in question and Company policies. In addition, you will continue to be eligible for paid time off consistent with applicable law and the RAPT policy generally applicable to similarly situated RAPT employees. Any benefits offered by RAPT are subject to change without notice at the sole discretion of RAPT.

7. Termination of Employment; Severance.

- (a) At-Will Status. The Company and you understand and agree that your employment relationship is at-will. Accordingly, there are no promises or representations concerning the duration of your employment relationship, which may be terminated by either you or Company at any time, with or without Cause (as defined herein) or Good Reason (as defined herein), and with or without advance notice. Your at-will status cannot be altered except in an express written agreement signed by you and the Company with specific written approval of the Board.
- **(b) Resignation by You.** You may resign from the Company with or without Good Reason. You agree to provide at least three (3) weeks advance written notice of a resignation without Good Reason, to allow for an orderly transition. The Company may accelerate the date your resignation is to become effective, in its sole discretion.
- **(c) Final Pay upon Termination for Any Reason.** Except as otherwise provided by this Agreement and/or required by law, upon termination of your employment for any reason, the Company's obligation to make payments hereunder shall cease, except that the Company shall pay all amounts due and payable for your services through your last day of employment (the "**Separation Date**"), including all accrued unpaid base salary earned through the Separation Date, any benefits accrued prior to the Separation Date, all accrued but unused vacation as of the Separation Date, and any reimbursable business expenses incurred but unreimbursed as of the Separation Date.
- **(d) Severance Benefits Unrelated to a Change in Control.** If your employment is terminated by the Company without Cause (and not due to your death or disability), or due to your resignation for Good Reason, in either case not within the twelve (12) month period following the effective date of a Change in Control (as defined herein), then subject to the preconditions set forth below in Section 7(f), you shall be eligible to receive the following severance benefits:

(i) Payment of severance equa	l to nine (9) months of your base salary in effect immediately prior to the Separation Date (or, the
level in effect prior to any reduction of base salary the	hat constitutes Good Reason), less applicable payroll tax withholdings and deductions, to be paid in
the form of salary continuation beginning on the first	st regularly scheduled payroll date of the Company following the 60th day following your Separation
from Service (as defined herein).	

- (ii) In addition, provided you timely elect to continue your group health insurance coverage after the Separation Date pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended or any state law of similar effect (collectively, "COBRA"), the Company will reimburse the monthly COBRA premiums (the "COBRA Payments") you pay to continue your health insurance coverage (including dependent coverage) under COBRA until the earlier of (A) a period of nine (9) months after the Separation Date, (B) the date you become eligible for group health insurance coverage through a new employer or (C) the date you cease to be eligible for COBRA coverage (the "COBRA Payment Period"). You must submit to the Company appropriate documentation of the foregoing health insurance payments, within sixty (60) days of making such payments, in order to be reimbursed. Notwithstanding the foregoing, if the Company determines, in its sole discretion, that it cannot pay the COBRA Payments without a substantial risk of violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), at the end of each remaining month of the COBRA Payment Period, the Company shall pay you directly a taxable monthly amount which, after taxes, equals the COBRA Payment amount the Company would have otherwise paid to you. You agree to promptly notify the Company in writing if you become eligible for group health insurance coverage through a new employer before the end of the COBRA Payment Period.
- **(e) Change in Control Termination.** If your employment is terminated by the Company without Cause (but not due to your death or Disability), or you resign for Good Reason, and in either case such termination or resignation occurs within twelve (12) months after the effective date of a Change in Control (as defined below), then subject to the preconditions set forth below in Section 7(f), you shall be eligible to receive the following severance benefits:
- (i) Payment of severance equal to twelve (12) months of your base salary in effect immediately prior to the Separation Date (or, the level in effect prior to any reduction of base salary that constitutes Good Reason), less applicable payroll tax withholdings and deductions, to be paid in the form of salary continuation beginning on the first regularly scheduled payroll date of the Company following the 60th day following your Separation from Service;
- (ii) Accelerated vesting of your equity awards so that you become one hundred percent (100%) vested in all such equity awards (unless otherwise specified in the applicable equity award agreement governing the applicable award);
- (iii) A lump sum cash payment equal to your target Annual Bonus less deductions and withholdings, to be paid on the first regularly scheduled payroll date of the Company following the 60th day following your Separation from Service); and

- (iv) Provided you timely elect to continue your group health insurance coverage after the Separation Date pursuant to COBRA, the Company will reimburse the COBRA Payments you pay to continue your health insurance coverage (including dependent coverage) under COBRA until the earlier of (A) a period of twelve (12) months after the Separation Date, (B) the date you become eligible for group health insurance coverage through a new employer or (C) the date you cease to be eligible for COBRA coverage (the "CIC COBRA Payment Period"). You must submit to the Company appropriate documentation of the foregoing health insurance payments, within sixty (60) days of making such payments, in order to be reimbursed. Notwithstanding the foregoing, if the Company determines, in its sole discretion, that it cannot pay the COBRA Payments without a substantial risk of violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), at the end of each remaining month of the CIC COBRA Payment Period, the Company shall pay you directly a taxable monthly amount which, after taxes, equals the COBRA Payment amount the Company would have otherwise paid to you. You agree to promptly notify the Company in writing if you become eligible for group health insurance coverage through a new employer before the end of the CIC COBRA Payment Period.
- **(f) Preconditions.** As a precondition to receiving any severance benefits under this Agreement, you must (i) remain in compliance with all continuing obligations you owe to the Company, including those under this Agreement and your CIIAA, and (ii) within twenty-one (21) days after the Separation Date (or forty-five (45) days after the Separation Date, in the event of a group reduction-in-force), you must timely sign and return to the Company a release of claims in a form acceptable to the Company and allow the release to become fully-effective and non-revocable by its terms.
- **(g) Prior CIC Benefits.** You and the Company hereby acknowledge and agree that: (i) this Agreement supersedes in its entirety any agreement, plan, or portion thereof pursuant to which you are or were entitled to any benefits in the event of a Change in Control, such that the parties' rights and obligations under any such prior agreement, plan, or portion thereof are null and void; and (ii) the severance benefits described in Section 7(e) are the sole benefits to which you shall be entitled in the event of a separation following a Change in Control.

8. Definitions.

(a) Cause. For purposes of this Agreement, "Cause," as determined by the Board acting in good faith and based on information then known to it, means: (i) your conviction (including a guilty plea or a no contest plea) of a felony, or of any other crime involving fraud, dishonesty or moral turpitude; (ii) your attempted commission of or participation in a fraud or act of material dishonesty against the Company; (iii) your material breach of any written agreement between you and the Company (including but not limited to your CIIAA) or material breach or material neglect of any statutory or fiduciary duty you owe to the Company as reasonably determined by the Company's Chief Executive Officer and the Board, in each case, after having provided you with not less than 30 days written notice of same and with the opportunity to cure of the same duration to the extent curable; or (iv) your conduct that constitutes gross insubordination, incompetence or habitual neglect of your duties as reasonably determined by the Company's Chief Executive Officer and the Board, in each case, after having provided you with not less than 30 days written notice of same and with the opportunity to cure of the same duration to the extent curable.

- **(b) Good Reason.** For purposes of this Agreement, "**Good Reason**" for your resignation of your employment will exist following the occurrence of any of the following without your written consent: (i) a material reduction in your duties (including responsibilities and/or authorities), provided, however, that a change in job position (including a change in title) shall not be deemed a "material reduction" in and of itself unless your new duties are substantially reduced from the prior duties; (ii) relocation of your principal place of employment to a place that increases your one-way commute by more than seventy five (75) miles as compared to your then current principal place of employment immediately prior to such relocation; or (iii) a reduction of at least 10% of your base salary or base compensation (unless pursuant to a salary or base compensation reduction program applicable generally to the Company's key employees), which percentage the parties agree is a "material" reduction; provided, however, that in order to resign for Good Reason, you must (1) provide written notice to the Company within 30 days after the first occurrence of the event giving rise to Good Reason setting forth the basis for your resignation, (2) allow the Company at least 30 days from receipt of such written notice to cure such event, and (3) if such event is not reasonably cured within such period, your resignation from all positions you then hold with the Company is effective not later than 90 days after the expiration of the cure period.
- (c) Change in Control. For purposes of this Agreement, "Change in Control" means: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions to which the Company is party (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any sale of stock for capital raising purposes) other than a transaction or series of transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Company held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, lease or other conveyance of all or substantially all of the assets of the Company, in each case, only to the extent such event also constitutes a "change in ownership" of the Company or a "change in the ownership of a substantial portion of the Company's assets" for purposes of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), if required for compliance with Section 409A of the Code.

9. Code Section 409A Compliance.

(a) Notwithstanding anything set forth in this Agreement to the contrary, any payments and benefits provided pursuant to this Agreement which constitute "deferred compensation" within the meaning of the Treasury Regulations issued pursuant to Section 409A of the Code shall not commence until you have incurred a "separation from service" (as such term is defined in the Treasury Regulation Section 1.409A-1(h) ("Separation From Service"), unless the Company reasonably determines that such amounts may be provided to you without causing you to incur the additional 20% tax under Section 409A.

(b) For the avoidance of doubt, it is intended that the payments and benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9) and this Agreement will be construed to the greatest extent possible as consistent with those provisions. To the extent not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A and incorporates by reference all required definitions and payment terms. For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulation Section 1.409A 2(b)(2) (iii)), your right to receive any installment payments under this Agreement (whether severance payments, reimbursements or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. Notwithstanding any provision to the contrary in this Agreement, if the Company (or, if applicable, the successor entity thereto) determines that any payments upon your Separation From Service set forth herein and/or under any other agreement with the Company constitute "deferred compensation" under Section 409A and you are, on your Separation From Service, a "specified employee" of the Company or any successor entity thereto, as such term is defined in Section 409A(a)(2)(B)(i) of the Code, then, solely, to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the payments upon your Separation From Service shall be delayed until the earlier to occur of: (a) the date that is six months and one day after your Separation From Service or (b) the date of your death (such applicable date, the "Specified **Employee Initial Payment Date**"). On the Specified Employee Initial Payment Date, the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the payments upon your Separation From Service that you would otherwise have received through the Specified Employee Initial Payment Date if the commencement of the payment of the severance benefits had not been so delayed pursuant to this section and (B) commence paying the balance of the severance benefits in accordance with the applicable payment schedules set forth in this Agreement.

10. 280G.

(a) If any payment or benefit that you will or may receive from the Company or otherwise (a "280G Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then any such 280G Payment will be equal to the Reduced Amount. The "Reduced Amount" will be either (x) the largest portion of the 280G Payment that would result in no portion of the 280G Payment (after reduction) being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the 280G Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the 280G Payment may be subject to the Excise Tax. If a reduction in a 280G Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction will occur in the manner (the "Reduction Method") that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the "Pro Rata Reduction Method").

- **(b)** Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the 280G Payment being subject to taxes pursuant to Section 409A of the Code that would not otherwise be subject to taxes pursuant to Section 409A of the Code, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, will be modified so as to avoid the imposition of taxes pursuant to Section 409A of the Code as follows: (A) as a first priority, the modification will preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (B) as a second priority, 280G Payments that are contingent on future events (*e.g.*, being terminated without Cause), will be reduced (or eliminated) before 280G Payments that are not contingent on future events; and (C) as a third priority, 280G Payments that are "deferred compensation" within the meaning of Section 409A of the Code will be reduced (or eliminated) before 280G Payments that are not "deferred compensation" within the meaning of Section 409A of the Code.
- (c) If Section 280G of the Code is not applicable by law to you, the Company will determine whether any similar law in your jurisdiction applies and should be taken into account.
- (d) The independent professional firm engaged by the Company for general tax audit purposes as of the day prior to the effective date of the Change in Control will make all determinations required to be made under this Section. If the firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control, the Company will appoint a nationally recognized independent professional firm to make the determinations required hereunder. The Company will bear all expenses with respect to the determinations by such firm required to be made hereunder. The Company will use commercially reasonable efforts to cause the firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to the Company and you within thirty (30) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by the Company or you) or such other time as requested by the Company or you.
- **(e)** If you receive a 280G Payment for which the Reduced Amount was determined pursuant to clause (x) of the first paragraph of this Section and the Internal Revenue Service determines thereafter that some portion of the 280G Payment is subject to the Excise Tax, you will promptly return to the Company a sufficient amount of the 280G Payment (after reduction pursuant to clause (x) of the first paragraph of this Section) so that no portion of the remaining 280G Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of the first paragraph of this Section, you will have no obligation to return any portion of the 280G Payment pursuant to the preceding sentence.
- 11. Conflicts. You agree that while employed by the Company you will not engage in any other employment, consulting or other business that would interfere with your duties to the Company or create a conflict of interest. You specifically warrant that you are not subject to an employment agreement or restrictive covenant preventing full performance of your duties to the Company. You agree not to bring to the Company or use in the performance of your responsibilities at the Company any materials or documents of a former employer that are not generally available to the public, unless you have obtained express written authorization from the former employer for their possession and use. You also agree to honor all obligations to former employers during your employment with the Company.

- 12. Outside Activities. You agree to devote such of your business time, energy, and skill to the affairs of the Company and its subsidiaries as shall be necessary to perform the duties of such positions; *provided*, *however*, that you may engage in civic and not-for-profit activities (*e.g.* charitable and industry association activities) so long as such activities do not materially interfere with your obligations to the Company or create a conflict of interest. You further agree that if, during the term of your relationship with the Company, you wish to perform any consulting or outside activities for any business or for-profit entities, including serving on any advisory boards or boards of director of for-profit entities, any such additional activities shall require the Company's prior written consent.
- 13. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with the Company, or the termination of your employment, shall be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. § 1-16, to the fullest extent permitted by law, by final, binding and confidential arbitration conducted by JAMS or its successor, under JAMS' then applicable rules and procedures for employment disputes before a single arbitrator (available upon request and also currently available at http://www.jamsadr.com/rules-employment-arbitration/). You acknowledge that by agreeing to this arbitration procedure, both you and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding. In addition, all claims, disputes, or causes of action under this section, whether by you or the Company, must be brought in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The arbitrator may not consolidate the claims of more than one person or entity, and may not preside over any form of representative or class proceeding. To the extent that the preceding sentences regarding class claims or proceedings are found to violate applicable law or are otherwise found unenforceable, any claim(s) alleged or brought on behalf of a class shall proceed in a court of law rather than by arbitration. This paragraph shall not apply to any action or claim that cannot be subject to mandatory arbitration as a matter of law, including, without limitation, claims brought pursuant to the California Private Attorneys General Act of 2004, as amended, to the extent such claims are not permitted by applicable law to be submitted to mandatory arbitration (collectively, the "Excluded Claims"). In the event you intend to bring multiple claims, including one of the Excluded Claims listed above, the Excluded Claims may be publicly filed with a court, while any other claims will remain subject to mandatory arbitration. You will have the right to be represented by legal counsel at any arbitration proceeding. Questions of whether a claim is subject to arbitration under this agreement shall be decided by the arbitrator. Likewise, procedural questions which grow out of the dispute and bear on the final disposition are also matters for the arbitrator. The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written statement signed by the arbitrator regarding the disposition of each claim and the relief, if any, awarded as to each claim, the reasons for the award, and the arbitrator's essential findings and conclusions on which the award is based. The arbitrator shall be authorized to award all relief that you or the Company would be entitled to seek in a court of law. The

Company shall pay all JAMS arbitration fees in excess of the administrative fees that you would be required to pay if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

14. Miscellaneous. This Agreement, together with its exhibits and any documentation related to your equity interests, forms the complete and exclusive statement of your employment agreement with the Company. It supersedes any other agreements or promises made to you by anyone, whether oral or written. Except for terms reserved to the Company's discretion, no term or provision of this Agreement may be amended waived, released, discharged or modified except in writing, signed by you and an authorized officer of the Company. This Agreement will be governed by the laws of California. If any provision of this Agreement is determined to be invalid or unenforceable, in whole or in part, this determination shall not affect any other provision of this offer letter agreement and the provision in question shall be modified so as to be rendered enforceable in a manner consistent with the intent of the parties insofar as possible under applicable law. This Agreement may be delivered and executed via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and shall be deemed to have been duly and validly delivered and executed and be valid and effective for all purposes.

If you are in agreement with the terms set forth above, please sign below and return the signed Agreement.

Sincerely,		
/s/ Brian Wong Brian Wong, CEO		
Understood and Accepted:		
/s/ William Ho William Ho	July 20, 2019 Date	

July 20, 2019

Dirk Brockstedt

Dear Dirk,

This letter agreement (the "**Agreement**") sets forth the terms and conditions of your continued employment with RAPT Therapeutics, Inc. ("**RAPT**" or the "**Company**"). This Agreement supersedes and replaces all prior written employment agreements, offer letters, or oral promises regarding the subject matter herein, including, but not limited to, your initial November 13, 2017 offer letter agreement with the Company.

- 1. **Position; Location.** You will continue to serve as the Company's Chief Scientific Officer and will be responsible for such duties as are assigned to you by the Company's Board of Directors (the "**Board**") or Chief Executive Officer. This position is full-time. As an exempt salaried employee, you are expected to work the Company's normal business hours as well as additional hours as required by the nature of your work assignments, and will not be eligible for overtime compensation. You will continue to work out of RAPT's offices located at 561 Eccles Avenue, South San Francisco, CA 94080. Of course, the Company may change your position, duties, and work location from time to time in its discretion.
- **2. CIIAA; Company Policies.** You are required to continue to abide by the terms of the confidential information and inventions assignment agreement (the "**CIIAA**") that you previously executed. In addition, you must continue to comply with Company's personnel policies and procedures as they may be interpreted, adopted or revised from time to time in the Company's sole discretion.
- **3. Base Salary.** You will continue to receive an annualized base salary of \$360,000, subject to deductions for taxes and other withholdings as required by law, and payable in accordance with RAPT's payroll cycle.
- **4. Annual Bonus.** You will continue to be eligible for an annual (calendar year) discretionary bonus, with a target amount equal to 40% of your annual base salary, contingent upon achievement, in the Company's sole discretion, of individual and corporate performance objectives established by the Company, as well as any other criteria the Company deems relevant (the "**Annual Bonus**"). To receive payment of any Annual Bonus, you must be employed by the Company through the date of payment of the Annual Bonus. Any Annual Bonus will not be earned until paid and will be paid on or before March 15 of the year following the year to which the Annual Bonus relates. If your employment terminates for any reason prior to the payment date of the Annual Bonus, you will not have earned, and will not be paid, any pro-rated Annual Bonus.
- **5. Equity.** Your existing equity awards will continue to be governed by the terms of the applicable plan documents, grant notices and equity agreements. In addition, you shall continue to be eligible for further equity awards from time to time as determined by the Board in its sole discretion.

6. Benefits. During your employment, you shall continue to be eligible to participate in the employee benefit plans maintained by RAPT as are in effect from time to time and generally available to similarly situated RAPT employees, subject in each case to the generally applicable terms and conditions of the plan in question and Company policies. In addition, you will continue to be eligible for paid time off consistent with applicable law and the RAPT policy generally applicable to similarly situated RAPT employees. Any benefits offered by RAPT are subject to change without notice at the sole discretion of RAPT.

7. Termination of Employment; Severance.

- (a) At-Will Status. The Company and you understand and agree that your employment relationship is at-will. Accordingly, there are no promises or representations concerning the duration of your employment relationship, which may be terminated by either you or Company at any time, with or without Cause (as defined herein) or Good Reason (as defined herein), and with or without advance notice. Your at-will status cannot be altered except in an express written agreement signed by you and the Company with specific written approval of the Board.
- **(b) Resignation by You.** You may resign from the Company with or without Good Reason. You agree to provide at least three (3) weeks advance written notice of a resignation without Good Reason, to allow for an orderly transition. The Company may accelerate the date your resignation is to become effective, in its sole discretion.
- **(c) Final Pay upon Termination for Any Reason.** Except as otherwise provided by this Agreement and/or required by law, upon termination of your employment for any reason, the Company's obligation to make payments hereunder shall cease, except that the Company shall pay all amounts due and payable for your services through your last day of employment (the "**Separation Date**"), including all accrued unpaid base salary earned through the Separation Date, any benefits accrued prior to the Separation Date, all accrued but unused vacation as of the Separation Date, and any reimbursable business expenses incurred but unreimbursed as of the Separation Date.
- **(d) Severance Benefits Unrelated to a Change in Control.** If your employment is terminated by the Company without Cause (and not due to your death or disability), or due to your resignation for Good Reason, in either case not within the twelve (12) month period following the effective date of a Change in Control (as defined herein), then subject to the preconditions set forth below in Section 7(f), you shall be eligible to receive the following severance benefits:
- (i) Payment of severance equal to nine (9) months of your base salary in effect immediately prior to the Separation Date (or, the level in effect prior to any reduction of base salary that constitutes Good Reason), less applicable payroll tax withholdings and deductions, to be paid in the form of salary continuation beginning on the first regularly scheduled payroll date of the Company following the 60th day following your Separation from Service (as defined herein).

- (ii) In addition, provided you timely elect to continue your group health insurance coverage after the Separation Date pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended or any state law of similar effect (collectively, "COBRA"), the Company will reimburse the monthly COBRA premiums (the "COBRA Payments") you pay to continue your health insurance coverage (including dependent coverage) under COBRA until the earlier of (A) a period of nine (9) months after the Separation Date, (B) the date you become eligible for group health insurance coverage through a new employer or (C) the date you cease to be eligible for COBRA coverage (the "COBRA Payment Period"). You must submit to the Company appropriate documentation of the foregoing health insurance payments, within sixty (60) days of making such payments, in order to be reimbursed. Notwithstanding the foregoing, if the Company determines, in its sole discretion, that it cannot pay the COBRA Payments without a substantial risk of violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), at the end of each remaining month of the COBRA Payment Period, the Company shall pay you directly a taxable monthly amount which, after taxes, equals the COBRA Payment amount the Company would have otherwise paid to you. You agree to promptly notify the Company in writing if you become eligible for group health insurance coverage through a new employer before the end of the COBRA Payment Period.
- **(e)** Change in Control Termination. If your employment is terminated by the Company without Cause (but not due to your death or Disability), or you resign for Good Reason, and in either case such termination or resignation occurs within twelve (12) months after the effective date of a Change in Control (as defined below), then subject to the preconditions set forth below in Section 7(f), you shall be eligible to receive the following severance benefits:
- (i) Payment of severance equal to twelve (12) months of your base salary in effect immediately prior to the Separation Date (or, the level in effect prior to any reduction of base salary that constitutes Good Reason), less applicable payroll tax withholdings and deductions, to be paid in the form of salary continuation beginning on the first regularly scheduled payroll date of the Company following the 60th day following your Separation from Service;
- (ii) Accelerated vesting of your equity awards so that you become one hundred percent (100%) vested in all such equity awards (unless otherwise specified in the applicable equity award agreement governing the applicable award);
- (iii) A lump sum cash payment equal to your target Annual Bonus less deductions and withholdings, to be paid on the first regularly scheduled payroll date of the Company following the 60th day following your Separation from Service); and
- (iv) Provided you timely elect to continue your group health insurance coverage after the Separation Date pursuant to COBRA, the Company will reimburse the COBRA Payments you pay to continue your health insurance coverage (including dependent coverage) under COBRA until the earlier of (A) a period of twelve (12) months after the Separation Date, (B) the date you become eligible for group health insurance coverage through a new employer or

- (C) the date you cease to be eligible for COBRA coverage (the "CIC COBRA Payment Period"). You must submit to the Company appropriate documentation of the foregoing health insurance payments, within sixty (60) days of making such payments, in order to be reimbursed. Notwithstanding the foregoing, if the Company determines, in its sole discretion, that it cannot pay the COBRA Payments without a substantial risk of violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), at the end of each remaining month of the CIC COBRA Payment Period, the Company shall pay you directly a taxable monthly amount which, after taxes, equals the COBRA Payment amount the Company would have otherwise paid to you. You agree to promptly notify the Company in writing if you become eligible for group health insurance coverage through a new employer before the end of the CIC COBRA Payment Period.
- **(f) Preconditions.** As a precondition to receiving any severance benefits under this Agreement, you must (i) remain in compliance with all continuing obligations you owe to the Company, including those under this Agreement and your CIIAA, and (ii) within twenty-one (21) days after the Separation Date (or forty-five (45) days after the Separation Date, in the event of a group reduction-in-force), you must timely sign and return to the Company a release of claims in a form acceptable to the Company and allow the release to become fully-effective and non-revocable by its terms.
- **(g) Prior CIC Benefits.** You and the Company hereby acknowledge and agree that: (i) this Agreement supersedes in its entirety any agreement, plan, or portion thereof pursuant to which you are or were entitled to any benefits in the event of a Change in Control, such that the parties' rights and obligations under any such prior agreement, plan, or portion thereof are null and void; and (ii) the severance benefits described in Section 7(e) are the sole benefits to which you shall be entitled in the event of a separation following a Change in Control.

8. Definitions.

- (a) Cause. For purposes of this Agreement, "Cause," as determined by the Board acting in good faith and based on information then known to it, means: (i) your conviction (including a guilty plea or a no contest plea) of a felony, or of any other crime involving fraud, dishonesty or moral turpitude; (ii) your attempted commission of or participation in a fraud or act of material dishonesty against the Company; (iii) your material breach of any written agreement between you and the Company (including but not limited to your CIIAA) or material breach or material neglect of any statutory or fiduciary duty you owe to the Company as reasonably determined by the Company's Chief Executive Officer and the Board, in each case, after having provided you with not less than 30 days written notice of same and with the opportunity to cure of the same duration to the extent curable; or (iv) your conduct that constitutes gross insubordination, incompetence or habitual neglect of your duties as reasonably determined by the Company's Chief Executive Officer and the Board, in each case, after having provided you with not less than 30 days written notice of same and with the opportunity to cure of the same duration to the extent curable.
- **(b) Good Reason.** For purposes of this Agreement, "**Good Reason**" for your resignation of your employment will exist following the occurrence of any of the following without your written consent: (i) a material reduction in your duties (including responsibilities and/or

authorities), *provided*, *however*, that a change in job position (including a change in title) shall not be deemed a "material reduction" in and of itself unless your new duties are substantially reduced from the prior duties; (ii) relocation of your principal place of employment to a place that increases your one-way commute by more than seventy five (75) miles as compared to your then current principal place of employment immediately prior to such relocation; or (iii) a reduction of at least 10% of your base salary or base compensation (unless pursuant to a salary or base compensation reduction program applicable generally to the Company's key employees), which percentage the parties agree is a "material" reduction; provided, however, that in order to resign for Good Reason, you must (1) provide written notice to the Company within 30 days after the first occurrence of the event giving rise to Good Reason setting forth the basis for your resignation, (2) allow the Company at least 30 days from receipt of such written notice to cure such event, and (3) if such event is not reasonably cured within such period, your resignation from all positions you then hold with the Company is effective not later than 90 days after the expiration of the cure period.

(c) Change in Control. For purposes of this Agreement, "Change in Control" means: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions to which the Company is party (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any sale of stock for capital raising purposes) other than a transaction or series of transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Company held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such transaction or series of transactions; or (ii) a sale, lease or other conveyance of all or substantially all of the assets of the Company, in each case, only to the extent such event also constitutes a "change in ownership" of the Company or a "change in the ownership of a substantial portion of the Company's assets" for purposes of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), if required for compliance with Section 409A of the Code.

9. Code Section 409A Compliance.

- (a) Notwithstanding anything set forth in this Agreement to the contrary, any payments and benefits provided pursuant to this Agreement which constitute "deferred compensation" within the meaning of the Treasury Regulations issued pursuant to Section 409A of the Code shall not commence until you have incurred a "separation from service" (as such term is defined in the Treasury Regulation Section 1.409A-1(h) ("Separation From Service"), unless the Company reasonably determines that such amounts may be provided to you without causing you to incur the additional 20% tax under Section 409A.
- **(b)** For the avoidance of doubt, it is intended that the payments and benefits set forth in this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Section 409A provided under Treasury Regulation Sections 1.409A-1(b)(4), 1.409A-1(b)(5) and 1.409A-1(b)(9) and this Agreement will be construed to the greatest extent possible as consistent with those provisions. To the extent not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A and incorporates by

reference all required definitions and payment terms. For purposes of Section 409A (including, without limitation, for purposes of Treasury Regulation Section 1.409A 2(b)(2)(iii)), your right to receive any installment payments under this Agreement (whether severance payments, reimbursements or otherwise) shall be treated as a right to receive a series of separate payments and, accordingly, each installment payment hereunder shall at all times be considered a separate and distinct payment. Notwithstanding any provision to the contrary in this Agreement, if the Company (or, if applicable, the successor entity thereto) determines that any payments upon your Separation From Service set forth herein and/or under any other agreement with the Company constitute "deferred compensation" under Section 409A and you are, on your Separation From Service, a "specified employee" of the Company or any successor entity thereto, as such term is defined in Section 409A(a)(2)(B)(i) of the Code, then, solely, to the extent necessary to avoid the incurrence of the adverse personal tax consequences under Section 409A, the timing of the payments upon your Separation From Service shall be delayed until the earlier to occur of: (a) the date that is six months and one day after your Separation From Service or (b) the date of your death (such applicable date, the "Specified Employee Initial Payment Date"). On the Specified Employee Initial Payment Date, the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the payments upon your Separation From Service that you would otherwise have received through the Specified Employee Initial Payment Date if the commencement of the payment of the severance benefits had not been so delayed pursuant to this section and (B) commence paying the balance of the severance benefits in accordance with the applicable payment schedules set forth in this Agreement.

10. 280G.

- (a) If any payment or benefit that you will or may receive from the Company or otherwise (a "280G Payment") would (i) constitute a "parachute payment" within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the "Excise Tax"), then any such 280G Payment will be equal to the Reduced Amount. The "Reduced Amount" will be either (x) the largest portion of the 280G Payment that would result in no portion of the 280G Payment (after reduction) being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the 280G Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the 280G Payment may be subject to the Excise Tax. If a reduction in a 280G Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction will occur in the manner (the "Reduction Method") that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the "Pro Rata Reduction Method").
- **(b)** Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the 280G Payment being subject to taxes pursuant to Section 409A of the Code that would not otherwise be subject to taxes pursuant to Section 409A of the Code, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, will be modified so as to avoid the imposition of taxes pursuant to Section 409A of the Code

as follows: (A) as a first priority, the modification will preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (B) as a second priority, 280G Payments that are contingent on future events (e.g., being terminated without Cause), will be reduced (or eliminated) before 280G Payments that are not contingent on future events; and (C) as a third priority, 280G Payments that are "deferred compensation" within the meaning of Section 409A of the Code will be reduced (or eliminated) before 280G Payments that are not "deferred compensation" within the meaning of Section 409A of the Code.

- (c) If Section 280G of the Code is not applicable by law to you, the Company will determine whether any similar law in your jurisdiction applies and should be taken into account.
- (d) The independent professional firm engaged by the Company for general tax audit purposes as of the day prior to the effective date of the Change in Control will make all determinations required to be made under this Section. If the firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control, the Company will appoint a nationally recognized independent professional firm to make the determinations required hereunder. The Company will bear all expenses with respect to the determinations by such firm required to be made hereunder. The Company will use commercially reasonable efforts to cause the firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to the Company and you within thirty (30) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by the Company or you) or such other time as requested by the Company or you.
- **(e)** If you receive a 280G Payment for which the Reduced Amount was determined pursuant to clause (x) of the first paragraph of this Section and the Internal Revenue Service determines thereafter that some portion of the 280G Payment is subject to the Excise Tax, you will promptly return to the Company a sufficient amount of the 280G Payment (after reduction pursuant to clause (x) of the first paragraph of this Section) so that no portion of the remaining 280G Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of the first paragraph of this Section, you will have no obligation to return any portion of the 280G Payment pursuant to the preceding sentence.
- 11. Conflicts. You agree that while employed by the Company you will not engage in any other employment, consulting or other business that would interfere with your duties to the Company or create a conflict of interest. You specifically warrant that you are not subject to an employment agreement or restrictive covenant preventing full performance of your duties to the Company. You agree not to bring to the Company or use in the performance of your responsibilities at the Company any materials or documents of a former employer that are not generally available to the public, unless you have obtained express written authorization from the former employer for their possession and use. You also agree to honor all obligations to former employers during your employment with the Company.
- **12. Outside Activities.** You agree to devote such of your business time, energy, and skill to the affairs of the Company and its subsidiaries as shall be necessary to perform the duties of such positions; *provided*, *however*, that you may engage in civic and not-for-profit activities

(e.g. charitable and industry association activities) so long as such activities do not materially interfere with your obligations to the Company or create a conflict of interest. You further agree that if, during the term of your relationship with the Company, you wish to perform any consulting or outside activities for any business or for-profit entities, including serving on any advisory boards or boards of director of for-profit entities, any such additional activities shall require the Company's prior written consent.

13. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with the Company, or the termination of your employment, shall be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. § 1-16, to the fullest extent permitted by law, by final, binding and confidential arbitration conducted by JAMS or its successor, under JAMS' then applicable rules and procedures for employment disputes before a single arbitrator (available upon request and also currently available at http://www.jamsadr.com/rules-employment-arbitration/). You acknowledge that by agreeing to this arbitration procedure, both you and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding. In addition, all claims, disputes, or causes of action under this section, whether by you or the Company, must be brought in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The arbitrator may not consolidate the claims of more than one person or entity, and may not preside over any form of representative or class proceeding. To the extent that the preceding sentences regarding class claims or proceedings are found to violate applicable law or are otherwise found unenforceable, any claim(s) alleged or brought on behalf of a class shall proceed in a court of law rather than by arbitration. This paragraph shall not apply to any action or claim that cannot be subject to mandatory arbitration as a matter of law, including, without limitation, claims brought pursuant to the California Private Attorneys General Act of 2004, as amended, to the extent such claims are not permitted by applicable law to be submitted to mandatory arbitration (collectively, the "Excluded Claims"). In the event you intend to bring multiple claims, including one of the Excluded Claims listed above, the Excluded Claims may be publicly filed with a court, while any other claims will remain subject to mandatory arbitration. You will have the right to be represented by legal counsel at any arbitration proceeding. Questions of whether a claim is subject to arbitration under this agreement shall be decided by the arbitrator. Likewise, procedural questions which grow out of the dispute and bear on the final disposition are also matters for the arbitrator. The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written statement signed by the arbitrator regarding the disposition of each claim and the relief, if any, awarded as to each claim, the reasons for the award, and the arbitrator's essential findings and conclusions on which the award is based. The arbitrator shall be authorized to award all relief that you or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS arbitration fees in excess of the administrative fees that you would be required to pay if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

14. Miscellaneous. This Agreement, together with its exhibits and any documentation related to your equity interests, forms the complete and exclusive statement of your employment agreement with the Company. It supersedes any other agreements or promises made to you by anyone, whether oral or written. Except for terms reserved to the Company's discretion, no term or provision of this Agreement may be amended waived, released, discharged or modified except in writing, signed by you and an authorized officer of the Company. This Agreement will be governed by the laws of California. If any provision of this Agreement is determined to be invalid or unenforceable, in whole or in part, this determination shall not affect any other provision of this offer letter agreement and the provision in question shall be modified so as to be rendered enforceable in a manner consistent with the intent of the parties insofar as possible under applicable law. This Agreement may be delivered and executed via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and shall be deemed to have been duly and validly delivered and executed and be valid and effective for all purposes.

If you are in agreement with the terms set forth above, please sign below and return the signed Agreement.

Sincerely,	
/s/ Brian Wong Brian Wong, CEO	
Understood and Accepted:	
/s/ Dirk Brockstedt Dirk Brockstedt	July 20, 2019 Date



March 17th, 2016

Rekha Hemrajani

On behalf of FLX Bio, Inc. (the "Company"), I am pleased to invite you to join the Company as Chief Operating Officer. FLX is an ambitious undertaking focused on the creation, development and commercialization of breakthrough therapies for cancer patients. We believe that this offer represents an extraordinary opportunity and we look forward to the possibility of you joining our team. This letter sets forth the terms of your employment:

- 1. **Position.** Your title will be Chief Operating Officer, and you will report to the CEO. While you render services to the Company, you will not engage in any other employment, consulting or other business activity (whether full-time or part-time) that would create a conflict of interest with the Company. By signing this letter agreement, you confirm to the Company that you have no contractual commitments or other legal obligations that would prohibit you from performing your duties for the Company.
- 2. **Salary.** The Company will pay you a starting salary at the rate of \$310,000 per year, payable in accordance with the Company's standard payroll schedule. This salary will be subject to adjustment pursuant to the Company's employee compensation policies in effect from time to time.
- 3. **Bonus.** Each year, you will be eligible to earn an annual bonus targeted at thirty (30%) of your annual base salary, which will allow you to participate in the success of the Company. Whether you receive a bonus for any given year, and the amount of any such bonus, shall be determined by the Board of Directors (the "Board") in its sole discretion, and shall be based upon achievement of individual and Company performance objectives as determined by the Board and other criteria to be determined by the Board. Any bonus shall be paid within thirty (30) days after the Board's determination that a bonus shall be awarded. Bonuses are typically determined in January and paid within 30-60 days afterwards. You must be employed on the day that your bonus (if any) is paid in order to earn the bonus. Therefore, if your employment is terminated either by you or the Company for any reason prior to the bonus being paid, you will not have earned the bonus and no partial or prorated bonus will be paid.

Rekha Hemrajani March 17th, 2016

- 4. **Employee Benefits.** As a regular employee of the Company, you will be eligible to participate in a number of Company-sponsored benefits. In addition, you will be entitled to paid vacation in accordance with the Company's vacation policy, as in effect from time to time.
- 5. **Stock Option.** Subject to the approval of the Board, you will be granted an option to purchase 550,000 shares of the Company's Common Stock (the "Option"). The exercise price per share of the Option will equal to the fair market value on the date of grant, and the Option shall be early exercisable. The Option will be subject to the terms and conditions of the Company's 2015 Stock Plan (the "Plan") and the applicable Stock Option Agreement. You will vest in 25% of the shares subject to the Option after 12 months of continuous service, and the balance will vest in equal monthly installments over the next 36 months of continuous service, as described in the applicable Stock Option Agreement

In addition, Subject to the approval of the Board, you will be granted a second option (the "Second Option") to purchase 200,000 shares of the Company's Common Stock. The exercise price per share of the Second Option will be equal to the fair market value on the date of grant, and the Second Option shall be early exercisable. Open completion of a business development goal set forth and agreed to by the Board, you will vest 25% of the shares, and the balance will vest in equal monthly installments over the next 36 months of continuous service, as described in the applicable Stock Option Agreement.

If you are subject to an Involuntary Termination (as defined below) within 12 months after a Change in Control (as defined below), then the Company shall accelerate the vesting of the Option and Second Option such that 100% of the shares subject to the Option and Second Option shall become fully vested.

6. Severance.

(a) **General.** If you are subject to an Involuntary Termination, then you will be entitled to the benefits described in this Section 6. However, this Section 6 will not apply unless you (i) have returned all Company property in your possession, (ii) have resigned as a member of the Board and all of its subsidiaries, to the extent applicable, and (iii) have executed a general release of all claims that you may have against the Company or persons affiliated with the Company. The release must be in the form prescribed by the Company, without alterations. You must execute and return the release on or before the date specified by the Company in the prescribed form (the "Release Deadline"). The Release Deadline will in no event be later than 50 days after your Separation. If you fail to return the release on or before the Release Deadline, or if you revoke the release, then you will not be entitled to the benefits described in this Section

Rekha Hemrajani March 17th, 2016

(b) Benefits.

- (i) If you are subject to an Involuntary Termination, then the Company will pay you severance equal to three (3) months of your base salary. This severance will be paid in the form of salary continuation at the rate in effect at the time of your Separation and in accordance with the Company's standard payroll procedures. The salary continuation payments will commence within 60 days after your Separation and, once they commence, will include any unpaid amounts accrued from the date of your Separation. However, if the 60-day period described in the preceding sentence spans two calendar years, then the payments will in any event begin in the second calendar year.
- (ii) In addition, if you are subject to an Involuntary Termination, and you timely elect continued coverage under COBRA, then the Company will pay your COBRA premiums for the same period of time that you are receiving the salary continuation described in Section 7(b)(i) above. This benefit will cease in the event you become eligible for group health insurance coverage through a new employer or cease to be eligible for COBRA continuation coverage for any reason.
- 7. **Proprietary Information and Inventions Agreement.** Like all Company employees, you will be required, as a condition of your employment with the Company, to sign the Company's standard Proprietary Information and Inventions Agreement, a copy of which is attached hereto as **Exhibit A**.
- 8. **Employment Relationship.** Employment with the Company is for no specific period of time. Your employment with the Company will be "at will," meaning that either you or the Company may terminate your employment at any time and for any reason, with or without cause. Any contrary representations that may have been made to you are superseded by this letter agreement. This is the full and complete agreement between you and the Company on this term. Although your job duties, title, compensation and benefits, as well as the Company's personnel policies and procedures, may change from time to time, the "at will" nature of your employment may only be changed in an express written agreement signed by you and a duly authorized officer of the Company (other than you).

9. Tax Matters.

- (a) **Withholding.** All forms of compensation referred to in this letter agreement are subject to reduction to reflect applicable withholding and payroll taxes and other deductions required by law.
- (b) **Section 409A.** For purposes of Section 409A of the Internal Revenue Code of 1986, as amended (the "Code"), each salary continuation payment under Section 4(b) is hereby designated as a separate payment. If the Company determines that you are a "specified employee" under Section 409A(a)(2)(B)(i) of the Code at the time of your Separation, then (i) the salary continuation payments under Section 7(b), to the extent that they are subject to Section 409A of the Code, will commence on the first business day following (A) expiration of the six-month period measured from your Separation or (B) the date of your death and (ii) the installments that otherwise would have been paid prior to such date will be paid in a lump sum when the salary continuation payments commence.

Rekha Hemrajani March 17th, 2016

- (c) **Tax Advice.** You are encouraged to obtain your own tax advice regarding your compensation from the Company. You agree that the Company does not have a duty to design its compensation policies in a manner that minimizes your tax liabilities, and you will not make any claim against the Company or the Board related to tax liabilities arising from your compensation.
- 10. **Interpretation, Amendment and Enforcement.** This letter agreement and Exhibit A supersede and replace any prior agreements, representations or understandings (whether written, oral, implied or otherwise) between you and the Company and constitute the complete agreement between you and the Company regarding the subject matter set forth herein. This letter agreement may not be amended or modified, except by an express written agreement signed by both you and a duly authorized officer of the Company. The terms of this letter agreement and the resolution of any disputes as to the meaning, effect, performance or validity of this letter agreement or arising out of, related to, or in any way connected with, this letter agreement, your employment with the Company or any other relationship between you and the Company (the "Disputes") will be governed by California law, excluding laws relating to conflicts or choice of law. You and the Company submit to the exclusive personal jurisdiction of the federal and state courts located in San Mateo County, California in connection with any Dispute or any claim related to any Dispute.
 - 11. **Definitions.** The following terms have the meaning set forth below wherever they are used in this letter agreement:

"Cause" means (a) your unauthorized use or disclosure of the Company's confidential information or trade secrets, which use or disclosure causes material harm to the Company, (b) your material breach of any agreement between you and the Company, (c) your material failure to comply with the Company's written policies or rules, (d) your conviction of, or your plea of "guilty" or "no contest" to, a felony under the laws of the United States or any State, (e) your gross negligence or willful misconduct, (f) your continuing failure to perform assigned duties after receiving written notification of the failure from the Board; (g) unsatisfactory job performance after receiving written notification of such from the Board; or (h) your failure to cooperate in good faith with a governmental or internal investigation of the Company or its directors, officers or employees, if the Company has requested your cooperation.

"Change in Control" means: (a) the acquisition of the Company by another entity by means of any transaction or series of related transactions to which the Company is party (including, without limitation, any stock acquisition, reorganization, merger or consolidation but excluding any sale of stock for capital raising purposes) other than a transaction or series of transactions in which the holders of the voting securities of the Company outstanding immediately prior to such transaction continue to retain (either by such voting securities remaining outstanding or by such voting securities being converted into voting securities of the surviving entity), as a result of shares in the Company held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such transaction or series of transactions; or (b) a sale, lease or other conveyance of all or substantially all of the assets of the Company.

Rekha Hemrajani March 17th, 2016

"Involuntary Termination" means either (a) your Termination Without Cause or (b) your Resignation for Good Reason.

"Resignation for Good Reason" means a Separation as a result of your resignation after one of the following conditions has come into existence without your consent:

- (a) A reduction in your base salary by more than 10%, excluding an across-the-board salary reduction that affects all senior management;
- (b) A material diminution of your authority, duties or responsibilities; or
- (c) A relocation of your principal workplace that increases your one-way commute by more than 30 miles.

A Resignation for Good Reason will not be deemed to have occurred unless you give the Company written notice of the condition within 90 days after the condition comes into existence, the Company fails to remedy the condition within 30 days after receiving your written notice, and you resign within thirty days after the expiration of this cure period.

"Separation" means a "separation from service," as defined in the regulations under Section 409A of the Code.

"Termination Without Cause" means a Separation as a result of a termination of your employment by the Company without Cause, provided you are willing and able to continue performing services within the meaning of Treasury Regulation 1.409A-l(n)(l).

* * * * *

We look forward to working with you as part of the FLX team. You may indicate your agreement with these terms and accept this offer by signing and dating both the enclosed duplicate original of this letter agreement and the enclosed Proprietary Information and Inventions Agreement and retuning them to me no later than March 21st, 2016.

Upon acceptance of this offer, you mutually agree to a start date on or before March 31st, 2016.

If you do not return this fully signed letter and the signed Proprietary Information and Inventions Agreement within this deadline, the Company's offer will expire. As required by law, your employment with the Company is contingent upon your providing legal proof of your identity and authorization to work in the United States.

Rekha Hemrajani March 17th, 2016

I have read and accept this employment offer:

/s/ Rekha Hemrajani

Signature of Rekha Hemrajani

Dated: 3/18/2016

Attachment

Exhibit A: Proprietary Information and Inventions Agreement

Very truly yours,

FLX BIO, INC.

By: /s/ Brian R. Wong
Brian R. Wong, M.D., Ph.D.
Chief Executive Officer

PROPRIETARY INFORMATION AND INVENTIONS AGREEMENT

The following confirms and memorializes an agreement that **FLX BIO, INC.,** a Delaware corporation (the "Company") and I (Rekha Hemrajani) have had since the commencement of my employment (which term, for purposes of this agreement, shall be deemed to include any relationship of service to the Company that I may have had prior to actually becoming an employee) with the Company in any capacity and that is and has been a material part of the consideration for my employment by Company:

- 1. I have not entered into, and I agree I will not enter into, any agreement either written or oral in conflict with this Agreement or my employment with Company. I will not violate any agreement with or rights of any third party or, except as expressly authorized by Company in writing hereafter, use or disclose my own or any third party's confidential information or intellectual property when acting within the scope of my employment or otherwise on behalf of Company. Further, I have not retained anything containing any confidential information of a prior employer or other third party, whether or not created by me.
- 2. Company shall own all right, title and interest (including patent rights, copyrights, trade secret rights, mask work rights, *sui generis* database rights and all other intellectual property rights of any sort throughout the world) relating to any and all inventions (whether or not patentable), works of authorship, mask works, designs, know-how, ideas and information made or conceived or reduced to practice, in whole or in part, by me during the term of my employment with Company to and only to the fullest extent allowed by California Labor Code Section 2870 (which is attached as **Appendix A**) (collectively "Inventions") and I will promptly disclose all Inventions to Company. Without disclosing any third party confidential information, I will also disclose anything I believe is excluded by Section 2870 so that the Company can make an independent assessment. I hereby make all assignments necessary to accomplish the foregoing. I shall further assist Company, at Company's expense, to further evidence, record and perfect such assignments, and to perfect, obtain, maintain, enforce, and defend any rights specified to be so owned or assigned. I hereby irrevocably designate and appoint Company as my agent and attorney-in-fact, coupled with an interest and with full power of substitution, to act for and in my behalf to execute and file any document and to do all other lawfully permitted acts to further the purposes of the foregoing with the same legal force and effect as if executed by me. Without limiting Section 1 or Company's other rights and remedies, if, when acting within the scope of my employment or otherwise on behalf of Company, I use or disclose my own or any third party's confidential information or intellectual property (or if any Invention cannot be fully made, used, reproduced, distributed and otherwise exploited without using or violating the foregoing), Company will have and I hereby grant Company a perpetual, irrevocable, worldwide royalty-free, non-exclusive, sublicensable right and license to expl
- 3. To the extent allowed by law, paragraph 2 includes all rights of paternity, integrity, disclosure and withdrawal and any other rights that may be known as or referred to as "moral rights," "artist's rights," "droit moral," or the like (collectively "Moral Rights"). To the extent I retain any such Moral Rights under applicable law, I hereby ratify and consent to any action that may be taken with respect to such Moral Rights by or authorized by Company and agree not to assert any Moral Rights with respect thereto. I will confirm any such ratifications, consents and agreements from time to time as requested by Company.

- 4. I agree that all Inventions and all other business, technical and financial information (including, without limitation, the identity of and information relating to customers or employees) I develop, learn or obtain during the term of my employment that relate to Company or the business or demonstrably anticipated business of Company or that are received by or for Company in confidence, constitute "Proprietary Information." I will hold in confidence and not disclose or, except within the scope of my employment, use any Proprietary Information. However, I shall not be obligated under this paragraph with respect to information I can document is or becomes readily publicly available without restriction through no fault of mine. Upon termination of my employment, I will promptly return to Company all items containing or embodying Proprietary Information (including all copies), except that I may keep my personal copies of (i) my compensation records, (ii) materials distributed to shareholders generally and (iii) this Agreement. I also recognize and agree that I have no expectation of privacy with respect to Company's telecommunications, networking or information processing systems (including, without limitation, stored computer files, email messages and voice messages) and that my activity and any files or messages on or using any of those systems may be monitored at any time without notice.
- 5. Until one year after the term of my employment, I will not encourage or solicit any employee or consultant of Company to leave Company for any reason (except for the bona fide firing of Company personnel within the scope of my employment).
- 6. I agree that during the term of my employment with Company (whether or not during business hours), I will not engage in any activity that is in any way competitive with the business or demonstrably anticipated business of Company, and I will not assist any other person or organization in competing or in preparing to compete with any business or demonstrably anticipated business of Company.
- 7. I agree that this Agreement is not an employment contract for any particular term and that I have the right to resign and Company has the right to terminate my employment at will, at any time, for any or no reason, with or without cause. In addition, this Agreement does not purport to set forth all of the terms and conditions of my employment, and, as an employee of Company, I have obligations to Company which are not set forth in this Agreement. However, the terms of this Agreement govern over any inconsistent terms and can only be changed by a subsequent written agreement signed by the President of Company.
- 8. I agree that my obligations under paragraphs 2, 3, 4, 5 and 9 of this Agreement shall continue in effect after termination of my employment, regardless of the reason or reasons for termination, and whether such termination is voluntary or involuntary on my part, and that Company is entitled to communicate my obligations under this Agreement to any future employer or potential employer of mine. My obligations under paragraphs 2, 3 and 4 also shall be binding upon my heirs, executors, assigns, and administrators and shall inure to the benefit of Company, it subsidiaries, successors and assigns.

9. Any dispute in the meaning, effect or validity of this Agreement shall be resolved in accordance with the laws of the State of California without regard to the conflict of laws provisions thereof. I further agree that if one or more provisions of this Agreement are held to be illegal or unenforceable under applicable California law, such illegal or unenforceable portion(s) shall be limited or excluded from this Agreement to the minimum extent required so that this Agreement shall otherwise remain in full force and effect and enforceable in accordance with its terms. This Agreement is fully assignable and transferable by Company, but any purported assignment or transfer by me is void. I also understand that any breach of this Agreement will cause irreparable harm to Company for which damages would not be an adequate remedy, and, therefore, Company will be entitled to injunctive relief with respect thereto in addition to any other remedies and without any requirement to post bond.

I HAVE READ THIS AGREEMENT CAREFULLY AND I UNDERSTAND AND ACCEPT THE OBLIGATIONS WHICH IT IMPOSES UPON ME WITHOUT RESERVATION. NO PROMISES OR REPRESENTATIONS HAVE BEEN MADE TO ME TO INDUCE ME TO SIGN THIS AGREEMENT. I SIGN THIS AGREEMENT VOLUNTARILY AND FREELY, IN DUPLICATE, WITH THE UNDERSTANDING THAT THE COMPANY WILL RETAIN ONE COUNTERPART AND THE OTHER COUNTERPART WILL BE RETAINED BY ME.

March 18, 2016	Employee
	/s/ Rekha Hemrajani
	Signature
	Rekha Hemrajani
	Name (Printed)
Accepted and Agreed to:	
FLX BIO, INC.	
By /s/ Brian Wong	
Brian Wong, CEO	

APPENDIX A

California Labor Code Section 2870. Application of provision providing that employee shall assign or offer to assign rights in invention to employer.

- (a) Any provision in an employment agreement which provides that an employee shall assign, or offer to assign, any of his or her rights in an invention to his or her employer shall not apply to an invention that the employee developed entirely on his or her own time without using the employer's equipment, supplies, facilities, or trade secret information except for those inventions that either:
- (1) Relate at the time of conception or reduction to practice of the invention to the employer's business, or actual or demonstrably anticipated research or development of the employer; or
 - (2) Result from any work performed by the employee for his employer.
- (b) To the extent a provision in an employment agreement purports to require an employee to assign an invention otherwise excluded from being required to be assigned under subdivision (a), the provision is against the public policy of this state and is unenforceable.

March 19, 2019

Rekha Hemrajani

Dear Rekha:

This letter sets forth the substance of the separation and consulting agreement (the "Agreement") that FLX Bio, Inc. (the "Company") is offering to you.

- 1. **SEPARATION**. Pursuant to our discussions, you are resigning your employment with the Company effective today, March 19, 2019 (the "Separation Date") and the Company has accepted your resignation as of the Separation Date. The Separation Date will be your last day of work for the Company and your employment termination date.
- **2. ACCRUED SALARY AND PAID TIME OFF.** On the Separation Date, the Company will pay you all accrued salary, and all accrued and unused vacation earned through the Separation Date, subject to standard payroll deductions and withholdings. You are entitled to these payments by law.
- **3. HEALTH INSURANCE.** To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company's current group health insurance policies, you will be eligible to continue your group health insurance benefits at your own expense following the Separation Date. Later, you may be able to convert to an individual policy through the provider of the Company's health insurance, if you wish. You will be provided with a separate notice describing your rights and obligations under COBRA.
- 4. PROMISSORY NOTE. You entered into a Limited Recourse Promissory Note effective June 15, 2016 by which you became indebted to the Company in the amount of \$255,000. The principal amount of the loan under the Promissory Note was reduced on February 13, 2018 in connection with the repurchase by the Company from The Sanjay Popli & Rekha Hemrajani Revocable Living Trust of 50,000 shares of common stock of the Company and on March 19, 2019 in connection with the repurchase by the Company from The Sanjay Popli & Rekha Hemrajani Revocable Living Trust of 321,876 shares of common stock of the Company. The amount of principal and accrued interest currently outstanding on the loan is \$138,236.10. Pursuant to the Promissory Note, you must repay the outstanding principal amount of the loan, plus interest, immediately upon your voluntary termination of services to the Company. You acknowledge that you are voluntarily terminating your services to the Company as of the Separation Date and agree to repay the outstanding principal and interest to the Company within thirty (30) days after the Separation Date, in which case the Company agrees to reduce the amount of accrued interest payable by you under the Promissory Note by \$4,669.15 (the "Interest Reduction Amount"). You acknowledge and agree that the Interest Reduction Amount will be a taxable benefit paid by the Company to you.

- **5. CONSULTING AGREEMENT.** If you timely sign this Agreement, allow it to become effective, and comply with your obligations under this Agreement, including, but not limited to, your obligation to repay the loan described in Paragraph 4, then the Company will engage your S-Corp entity as a consultant under the terms set forth below.
- **a. Consulting Period.** You will serve as a consultant to the Company beginning on March 20, 2019, and ending on June 20, 2019 (the "Consulting Period") as a Senior Advisor to the CEO, unless terminated earlier pursuant to Section 5(i).
- **b.** Consulting Services. As a consultant, you will be responsible for assisting the Company in any area of your expertise, as reasonably requested by the Company (the "Consulting Services"). It is anticipated that you will provide eight (8) hours of Consulting Services per week. You will conduct the Consulting Services at a location of your choosing. You will exercise the highest degree of professionalism and utilize your expertise and creative talents in performing the Consulting Services. You will exercise the highest degree of professionalism and utilize your expertise and creative talents in performing the Consulting Services.
- c. Consulting Fee. Provided that you (i) perform the Consulting Services to the Company's satisfaction (as determined by the Company in its sole discretion), and (ii) comply with your contractual obligations to the Company (including, without limitation, the obligations set forth herein), then the Company will pay you consulting fees equal to \$425.00 per hour.
- **d.** Equity. During your employment with the Company, you were granted options to purchase shares of the Company's common stock pursuant to the Company's 2015 Stock Plan (the "Plan"). You agree that during the Consulting Period, the vesting on these options will cease. As a further benefit to you, however, the Company will extend the time period during which you may exercise your vested options such that you may exercise any shares that vested during your employment through June 20, 2020, subject to your continued compliance with all legal and contractual obligations you owe to the Company. You are encouraged to obtain independent tax advice concerning your options and how the terms of this Agreement may affect the tax treatment of the options. Except as expressly provided herein, the options shall continue to be governed in all respects by the governing plan documents and agreements.
- **e. Tax Treatment.** The Company will not make any withholdings or deductions, and will issue you a form 1099, with respect to any consulting fees paid to you. You will be responsible for all taxes with respect to the consulting fees, and you agree to indemnify, hold harmless and defend the Company from any and all claims, liabilities, damages, taxes, fines or penalties sought or recovered by any governmental entity, including but not limited to the Internal Revenue Service or any state taxing authority, arising out of or in connection with the consulting fees.
- **f. Independent Contractor Status.** You agree that during the Consulting Period, (i) you will be an independent contractor to the Company and not an employee of the Company, and (ii) the Company will not make payments for state or federal income tax, FICA (social security and Medicare), make unemployment insurance or disability insurance contributions, or obtain workers' compensation insurance on your behalf.

- **g. Protection of Information.** You agree that during the Consulting Period and thereafter, you will not use or disclose any confidential or proprietary information or materials of the Company that you obtain or develop in the course of performing consulting services for the Company. Any and all work product you create in the course of performing consulting services for the Company will be the sole and exclusive property of the Company. You hereby assign to the Company all right, title, and interest in all inventions, techniques, processes, materials, and other intellectual property developed in the course of performing consulting services for the Company.
- **h. Limitations on Authority.** You will have no responsibilities or authority as a consultant to the Company other than as provided above. You agree not to represent or purport to represent the Company in any manner whatsoever to any third party except with my prior written consent.
- i. Standards of Conduct; Noncompetition. You agree not to engage in any conduct during the Consulting Period that is detrimental to the interests of the Company. You further agree during the Consulting Period that you will not, directly or indirectly, as an officer, director, employee, consultant, owner, manager, member, partner, or in any other capacity solicit, perform, or provide, or attempt to perform or provide Conflicting Services in the United States, nor will you assist another person to solicit, perform or provide or attempt to perform or provide Conflicting Services in the United States. You and the Company agree that for purposes of this Agreement, "Conflicting Services" means any product, service, or process, including thereof, of any person or organization other than the Company that is substantially similar to or competitive with a product, service, or process, including the research and development thereof, of the Company. Notwithstanding the above, you will not be deemed to be engaged directly or indirectly in any Conflicting Services if you participate in any such business solely as a passive investor in up to one percent (1%) of the equity securities of a company or partnership, the securities of which are publicly traded. The Company understands that you will be employed by Arcus Biosciences during the Consulting Period, which the Company does not consider to be "Conflicting Services."
- **j. Termination of Consulting Period.** Either you or the Company may terminate the Consulting Period, at any time and for any reason, upon thirty (30) days written notice to the other party. Upon termination of the Consulting Period by either party, the Company will have no further obligations to you, including any obligation to pay you further consulting fees.
- **6. OTHER COMPENSATION OR BENEFITS.** You acknowledge that, except as expressly provided in this Agreement, you will not receive any additional compensation, severance, or benefits after the Separation Date. You further expressly acknowledge and agree that you are not entitled to any severance benefits from the Company under the terms of your Employment Agreement with the Company as your termination is not Involuntary as that term is defined in the Employment Agreement.
- **7. EXPENSE REIMBURSEMENTS.** You agree that, within ten (10) days after the Separation Date, you will submit your final documented expense reimbursement statement reflecting all business expenses you incurred through the Separation Date, if any, for which you seek reimbursement. The Company will reimburse you for these expenses pursuant to its regular business practice.

- **8. RETURN OF COMPANY PROPERTY.** By the Separation Date, you agree to return to the Company all Company documents (and all copies thereof) and other Company property within your possession, custody or control, including, but not limited to, Company files, notes, drawings, records, business plans and forecasts, financial information, specifications, computer-recorded information, tangible property (including, but not limited to), credit cards, entry cards, identification badges, and keys; and, any materials of any kind that contain or embody any proprietary or confidential information of the Company (and all reproductions thereof); **provided, however**, that you are permitted to retain any Company property that is necessary for the performance of your services under the Consulting Agreement. Your timely return of all such Company documents and other property is a condition precedent to your receipt of the benefits provided under this Agreement.
- **9. PROPRIETARY INFORMATION OBLIGATIONS.** You acknowledge and agree to abide by your continuing obligations under your Proprietary Information and Inventions Agreement, a copy of which is attached hereto as **Exhibit A**.
- 10. CONFIDENTIALITY. The provisions of this Agreement will be held in strictest confidence by you and will not be publicized or disclosed in any manner whatsoever; provided, however, that: (a) you may disclose this Agreement to your immediate family; (b) you may disclose this Agreement in confidence to your attorneys, accountants, auditors, tax preparers, and financial advisors; (c) you may disclose this Agreement, and any other documents or information (without notice to the Company) when communicating with the Equal Employment Opportunity Commission, the Department of Labor, the National Labor Relations Board, the Occupational Safety and Health Administration, the Securities and Exchange Commission or any other federal, state or local governmental agency or commission ("Governmental Agencies"), or during the course of an investigation or proceeding that may be conducted by any Government Agency; and (d) you may disclose this Agreement insofar as such disclosure may be necessary to enforce its terms or as otherwise required by law. In particular, and without limitation, you agree not to disclose the terms of this Agreement to any current or former Company employee. Nothing in this provision or this Agreement is intended to prohibit or restrain you in any manner from making disclosures that are protected under the whistleblower provisions of federal or state law or regulation.
- 11. NONDISPARAGEMENT. You agree not to disparage the Company and its officers, directors, employees, shareholders and agents, in any manner likely to be harmful to them or their business, business reputations or personal reputations, and the Company's officers and directors agree not to disparage you in any manner likely to be harmful to your personal or professional reputations; provided that both you and the Company may respond accurately and fully to any question, inquiry or request for information when required by legal process (e.g., a valid subpoena or other similar compulsion of law) or as part of a government investigation. In addition, nothing in this provision or this Agreement is intended to prohibit or restrain you in any manner from making disclosures that are protected under the whistleblower provisions of federal or state law or regulation.

12. NO ADMISSIONS. You understand and agree that the promises and payments in consideration of this Agreement shall not be construed to be an admission of any liability or obligation by the Company to you or to any other person, and that the Company makes no such admission.

13. RELEASE OF CLAIMS.

- a. **General Release.** In exchange for the consideration under this Agreement to which you would not otherwise be entitled, you hereby generally and completely release the Company and its directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, parent or subsidiary entities, insurers, affiliates and assigns from any and all claims, liabilities and obligations, both known and unknown, that arise out of or are in any way related to events, acts, conduct, or omissions prior to or on the date you sign this Agreement.
- **b.** Scope of Release. The Released Claims include, but are not limited to: (i) all claims arising out of or in any way related to your employment with the Company, or the termination of that employment; (ii) all claims related to your compensation or benefits from the Company, including salary, bonuses, commissions, vacation, paid time off, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership, equity, or profits interests in the Company; (iii) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing; (iv) all tort claims, including claims for fraud, defamation, emotional distress, and discharge in violation of public policy; and (v) all federal, state, and local statutory claims, including claims for discrimination, harassment, retaliation, attorneys' fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act of 1967 (as amended) (the "ADEA"), the California Labor Code (as amended), and the California Fair Employment and Housing Act (as amended).
- c. ADEA Waiver. You acknowledge that you are knowingly and voluntarily waiving and releasing any rights you may have under the ADEA ("ADEA Waiver"), and that the consideration given for the waiver and release in this Section is in addition to anything of value to which you are already entitled. You further acknowledge that you have been advised, as required by the ADEA, that: (i) your waiver and release do not apply to any rights or claims that may arise after the date that you sign this Agreement; (ii) you should consult with an attorney prior to signing this Agreement (although you may choose voluntarily not to do so); (iii) you have twenty-one (21) days to consider this Agreement (although you may choose voluntarily to sign it earlier); (iv) you have seven (7) days following the date you sign this Agreement to revoke the ADEA Waiver (by providing written notice of your revocation to me); and (v) the ADEA Waiver will not be effective until the date upon which the revocation period has expired unexercised, which will be the eighth day after you sign this Agreement ("Effective Date").
- **d.** Excluded Claims. Notwithstanding the foregoing, the following are not included in the Released Claims (the "Excluded Claims"): (i) any rights or claims for indemnification you may have pursuant to any written indemnification agreement with the

Company to which you are a party or under applicable law; (ii) any rights which are not waivable as a matter of law; and (iii) any claims for breach of this Agreement. You hereby represent and warrant that, other than the Excluded Claims, you are not aware of any claims you have or might have against any of the Released Parties that are not included in the Released Claims. You understand that nothing in this Agreement limits your ability to file a charge or complaint with any Governmental Agency. While this Agreement does not limit your right to receive an award for information provided to the Securities and Exchange Commission, you understand and agree that, to maximum extent permitted by law, you are otherwise waiving any and all rights you may have to individual relief based on any claims that you have released and any rights you have waived by signing this Agreement.

- 14. SECTION 1542 WAIVER. In granting the release herein, which includes claims that may be unknown to you at present, you acknowledge that you have read and understand Section 1542 of the California Civil Code: "A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release and that, if known by him or her, would have materially affected his or her settlement with the debtor or released party." You hereby expressly waive and relinquish all rights and benefits under that section and any law or legal principle of similar effect in any jurisdiction with respect to the releases granted herein, including but not limited to the release of unknown and unsuspected claims granted in this Agreement.
- 15. **DISPUTE RESOLUTION.** To ensure the timely and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action arising from or relating to the enforcement, breach, performance, negotiation, execution, or interpretation of this Agreement, your employment, or the termination of your employment, including but not limited to statutory claims, shall be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law by final, binding and confidential arbitration, by a single arbitrator, conducted by JAMS, Inc. ("JAMS") under the then applicable JAMS rules (which can be found at the following web address: https://www.jamsadr.com/rules-employment-arbitration/). By agreeing to this arbitration procedure, both you and the Company waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding. The Company acknowledges that you will have the right to be represented by legal counsel at any arbitration proceeding. In addition, all claims, disputes, or causes of action under this paragraph, whether by you or the Company, must be brought in an individual capacity, and shall not be brought as a plaintiff (or claimant) or class member in any purported class or representative proceeding, nor joined or consolidated with the claims of any other person or entity. The arbitrator may not consolidate the claims of more than one person or entity, and may not preside over any form of representative or class proceeding. To the extent that the preceding sentences regarding class claims or proceedings are found to violate applicable law or are otherwise found unenforceable, any claim(s) alleged or brought on behalf of a class shall proceed in a court of law rather than by arbitration. This paragraph shall not apply to an action or claim brought in court pursuant to the California Private Attorneys General Act of 2004, as amended. The arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision, to include the arbitrator's essential findings and

conclusions and a statement of the award. The arbitrator shall be authorized to award any or all remedies that you or the Company would be entitled to seek in a court of law. The Company shall pay all JAMS' arbitration fees in excess of the amount of court fees that would be required of you if the dispute were decided in a court of law. Nothing in this Agreement is intended to prevent either you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

16. MISCELLANEOUS. This Agreement, including Exhibit A, constitutes the complete, final and exclusive embodiment of the entire agreement between you and the Company with regard to the subject matter hereof. It is entered into without reliance on any promise or representation, written or oral, other than those expressly contained herein, and it supersedes any other agreements, promises, warranties or representations concerning its subject matter. This Agreement may not be modified or amended except in a writing signed by both you and a duly authorized officer of the Company. This Agreement will bind the heirs, personal representatives, successors and assigns of both you and the Company, and inure to the benefit of both you and the Company, their heirs, successors and assigns. If any provision of this Agreement is determined to be invalid or unenforceable, in whole or in part, this determination shall not affect any other provision of this Agreement and the provision in question shall be modified so as to be rendered enforceable in a manner consistent with the intent of the parties insofar as possible under applicable law. This Agreement shall be construed and enforced in accordance with the laws of the State of California without regard to conflicts of law principles. Any ambiguity in this Agreement shall not be construed against either party as the drafter. Any waiver of a breach of this Agreement, or rights hereunder, shall be in writing and shall not be deemed to be a waiver of any successive breach or rights hereunder. This Agreement may be executed in counterparts which shall be deemed to be part of one original, and facsimile and signatures transmitted by PDF shall be equivalent to original signatures.

If this Agreement is acceptable to you, please sign below and return the original to me within twenty-one (21) days. The Company's offer contained herein will automatically expire if we do not receive the fully signed Agreement within this timeframe.

Sincerely,

By: /s/ Brian Wong
Brian Wong, M.D., Ph.D.
Chief Executive Officer

Exhibit A - Proprietary Information and Inventions Agreement

I HAVE READ, UNDERSTAND AND AGREE FULLY TO THE FOREGOING AGREEMENT:			
/s/ Rekha Hemrajani	3/19/2019		
Rekha Hemrajani	Date		

Ехнівіт А

PROPRIETARY INFORMATION AND INVENTIONS AGREEMENT

April 30, 2019

Rekha Hemrajani

Dear Rekha:

This letter is with regard to the separation and consulting agreement (the "Agreement") between you and FLX Bio, Inc. (the "Company") dated March 19, 2019. Under Section 4 of the Agreement, you agreed to repay the Company, within 30 days (i.e., by April 18, 2019), a total of \$133,566.95 of principal and accrued interest (the "Loan Amount) owed by you to the Company.

On April 18, 2019, you requested that the Company extend the due date for the Loan Amount and reduce the portion of the Loan Amount to be repaid in cash to \$73,004.79 and accept 178,124 of the shares pledged as collateral by The Sanjay Popli & Rekha Hemrajani Revocable Living Trust in satisfaction the remaining balance of \$60,562.16, based on the original \$0.34 per share purchase price for such shares.

Section 4 of the Agreement is hereby amended and restated in its entirety as follows:

"4. PROMISSORY NOTE. You entered into a Limited Recourse Promissory Note effective June 15, 2016 by which you became indebted to the Company in the amount of \$255,000. The principal amount of the loan under the Promissory Note was reduced on February 13, 2018 in connection with the repurchase by the Company from The Sanjay Popli & Rekha Hemrajani Revocable Living Trust of 50,000 shares of common stock of the Company and on March 19, 2019 in connection with the repurchase by the Company from The Sanjay Popli & Rekha Hemrajani Revocable Living Trust of 321,876 shares of common stock of the Company. The Company agrees to reduce the amount of accrued interest payable by you under the Promissory Note by \$4,669.15 (the "Interest Reduction Amount"). You acknowledge and agree that the Interest Reduction Amount will be a taxable benefit paid by the Company to you. After taking into account the Interest Reduction Amount, the amount of principal and accrued interest outstanding on the loan as of the Separation Date is \$133,566.95 (the "Outstanding Loan Amount"). Pursuant to the Promissory Note, you must repay the outstanding principal amount of the loan, plus interest, immediately upon your voluntary termination of services to the Company. You acknowledge that you are voluntarily terminating your services to the Company as of the Separation Date and agree to satisfy in full the Outstanding Loan Amount by (a) paying \$73,004.79 in cash to the Company by May 3, 2019 and causing the transfer to the Company of 178,124 of the shares pledged as collateral by The Sanjay Popli & Rekha Hemrajani Revocable Living Trust."

If the foregoing is acceptable to you, please sign below, cause the execution of Hemrajani Revocable Living Trust and return the originals to me.	the enclosed stock powers on behalf of the The Sanjay Popli & Rekha					
Sincerely,						
By: /s/ Brian Wong Brian Wong, M.D., Ph.D. Chief Executive Officer						
I HAVE READ, UNDERSTAND AND AGREE FULLY TO THE FOREGOING AGREEMENT:						
/s/ Rekha Hemrajani Rekha Hemrajani	April 30, 2019 Date					
2						

November 15, 2016

Linda Kozick

Dear Linda:

The Board of Directors (the "Board") of FLX Bio, Inc. (the "Company") is pleased to welcome you as a member of the Board. We appreciate your willingness to accept this position, and we look forward to your valuable contributions.

In connection with your services to the Company, we will pay you the following:

- Cash Retainer: An annual cash retainer of \$20,000, payable in quarterly installments. The retainer will be subject to adjustment pursuant to the Company's director compensation policies in effect from time to time.
- Stock Options: Subject to the terms and conditions of the Company's 2015 Stock Option Plan and the applicable stock option agreement, you will be granted an option to purchase 100,000 of the company's Common Stock (the "Initial Grant"). You will vest in 25% of the Initial Grant after 12 months, and the balance will vest in equal monthly installments over the next 36 months, as described in the applicable Stock Option Agreement. The Board will also grant you an additional 25,000 shares per year (the "Annual Grant") starting at your second anniversary of Board service. The Annual Grants will vest in equal monthly installments over 48 months. The exercise price per share of the Initial Grant and the Annual Grants will be equal to the fair market value per share on the date the option is granted, and the options will be early exercisable. In addition, if FLX Bio is subject to a Change of Control, then the Company shall accelerate the vesting of your Stock Options such that 100% of your Stock Options shall become fully vested.

We will review our compensation policy for Board members in the event of an initial public offering.

We will also reimburse you for reasonable expenses that you incur in connection with attendance at meetings of the Board, or committees of the Board, in accordance with the Company's generally applicable reimbursement policies.

In connection with your services to the Company, we expect that technical, business or financial information of the Company ("Confidential Information") will be disclosed to you. To the extent that Confidential Information is not publicly known or not otherwise previously known by you without an obligation of confidentiality, you agree not to use (except in connection with your services to the Company) or disclose Confidential Information to any third party and to take reasonable steps to maintain the confidential nature of all Confidential Information. By signing this letter agreement, you represent and warrant that you have no contractual commitments or other legal obligations to a third party that would prohibit you from performing your duties for the Company.

As part of your overall responsibilities, the Company and the Company's stockholders reserve the right to remove any individual from the Board at any time in accordance with the provisions of applicable law. You, of course, may also terminate your relationship with the Company at any time. When you cease to be a member of the Board (whether at our request or your election), you must return all Confidential Information of the Company.

On behalf of the full Board, we are excited about your joining our Board and look forward to working with you to help make the Company truly great and prosperous. You may indicate your agreement with these terms and accept this offer by signing and dating the enclosed duplicate original of this letter agreement and returning to me.

If you have any questions, please do not hesitate to call me.

Very truly yours,

FLX Bio, Inc.

/s/ Brian Wong

Brian Wong, M.D. Ph.D., Chief Executive Officer

I have read and accept this offer:

/s/ Linda Kozick

Signature of Linda Kozick

Dated: 11/21/16



January 12, 2018

Dr. Michael F. Giordano, M.D.

Dear Michael:

The Board of Directors (the "Board") of FLX Bio, Inc. (the "Company") is pleased to welcome you as a member of the Board. We appreciate your willingness to accept this position, and we look forward to your valuable contributions.

In connection with your services to the Company, we will pay you the following:

- Cash Retainer: An annual cash retainer of \$20,000, payable in quarterly installments. The retainer will be subject to adjustment pursuant to the Company's director compensation policies in effect from time to time.
- Stock Options: Subject to the terms and conditions of the Company's 2015 Stock Option Plan and the applicable stock option agreement, you will be granted an option to purchase 100,000 of the company's Common Stock (the "Initial Grant"). You will vest in equal monthly installments over the next 48 months, as described in the applicable Stock Option Agreement. The Board will also grant you an additional 25,000 shares per year (the "Annual Grant") starting at your second anniversary of Board service. The Annual Grants will vest in equal monthly installments over 48 months. The exercise price per share of the Initial Grant and the Annual Grants will be equal to the fair market value per share on the date the option is granted, and the options will be early exercisable. In addition, if FLX Bio is subject to a Change of Control, then the Company shall accelerate the vesting of your Stock Options such that 100% of your Stock Options shall become fully vested.

We will review our compensation policy for Board members in the event of an initial public offering.

We will also reimburse you for reasonable expenses that you incur in connection with attendance at meetings of the Board, or committees of the Board, in accordance with the Company's generally applicable reimbursement policies.

FLX Bio, Inc.; 561 Eccles Avenue, South San Francisco, CA 94080

In connection with your services to the Company, we expect that technical, business or financial information of the Company ("Confidential Information") will be disclosed to you. To the extent that Confidential Information is not publicly known or not otherwise previously known by you without an obligation of confidentiality, you agree not to use (except in connection with your services to the Company) or disclose Confidential Information to any third party and to take necessary and reasonable steps to maintain the confidential nature of all Confidential Information. By signing this letter agreement, you represent and warrant that you have no contractual commitments or other legal obligations to a third party that would prohibit you from performing your duties for the Company.

As part of your overall responsibilities, the Company and the Company's stockholders reserve the right to remove any individual from the Board at any time in accordance with the provisions of applicable law. You, of course, may also terminate your relationship with the Company at any time. When you cease to be a member of the Board (whether at our request or your election), you must return all Confidential Information of the Company.

On behalf of the full Board, we are excited about your joining our Board and look forward to working with you to help make the Company truly great and prosperous. You may indicate your agreement with these terms and accept this offer by signing and dating the enclosed duplicate original of this letter agreement and returning it to me.

If you have any questions, please do not hesitate to call me.

Very truly yours,

FLX Bio, Inc.

/s/ Brian R. Wong

Brian R. Wong, M.D., Ph.D. Chief Executive Officer

I have read and accept this offer:

/s/ Michael F. Giordano

Signature of Michael F. Giordano, M.D.

Dated: 1/19/18

FLX BIO, INC.

JUNE 23, 2015

Bill Rieflin

Dear Bill:

The Board of Directors (the "Board") of FLX Bio, Inc. (the "Company") is pleased to welcome you as a member of the Board. We appreciate your willingness to accept this position, and we look forward to your valuable contributions.

In connection with your services to the Company, we will pay you an annual retainer of \$20,000, payable in quarterly installments. The retainer will be subject to adjustment pursuant to the Company's director compensation policies in effect from time to time. We will also reimburse you for reasonable expenses that you incur in connection with attendance at meetings of the Board, or committees of the Board, in accordance with the Company's generally applicable reimbursement policies. We will review our compensation policy for Board members in the event of an initial public offering.

In connection with your services to the Company, we expect that technical, business or financial information of the Company ("Confidential Information") will be disclosed to you. To the extent that Confidential Information is not publicly known or not otherwise previously known by you without an obligation of confidentiality, you agree not to use (except in connection with your services to the Company) or disclose Confidential Information to any third party and to take reasonable steps to maintain the confidential nature of all Confidential Information. By signing this letter agreement, you represent and warrant that you have no contractual commitments or other legal obligations to a third party that would prohibit you from performing your duties for the Company.

As part of our overall responsibilities, the Company and the Company's stockholders reserve the right to remove any individual from the Board at any time in accordance with the provisions of applicable law. You, of course, may also terminate your relationship with Company at any time. When you cease to be a member of the Board (whether at our request or your election), you must return all Confidential Information to the Company.

On behalf of the full Board, we are excited about your joining our Board and look forward to working with you to help make the Company truly great and prosperous. You may indicate your agreement with these terms and accept this offer by signing and dating the enclosed duplicate original of this letter agreement and returning it to me.

Bill Rieflin				
June 23, 2015				
Page 2				

If you have any questions please do not hesitate to call me.

Very truly yours,

FLX BIO, INC.

/s/ David Goeddel

David Goeddel, Ph.D, Interim Chief Executive Officer

I have read and accept this offer:

/s/ Bill Rieflin

Signature of Bill Rieflin

Dated: 6/29/15

[***] = Certain confidential information contained in this document, marked by brackets, is filed with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

CLINICAL TRIAL COLLABORATION AND SUPPLY AGREEMENT

by and between

MSD International GmbH

and

FLX Bio, Inc.

Dated: November 1, 2018

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CLINICAL TRIAL COLLABORATION AND SUPPLY AGREEMENT

This CLINICAL TRIAL COLLABORATION AND SUPPLY AGREEMENT (this "**Agreement**"), is entered into as of November 1, 2018 (the "**Effective Date**"), by and between MSD International GmbH, having a place of business at Weystrasse 20, 6000 Luzern 6, Switzerland ("**Merck**"), and FLX Bio, Inc., having a place of business at 561 Eccles Ave., South San Francisco, CA 94080 ("**FLX**"). Merck and FLX are each referred to herein individually as "**Party**" and collectively as "**Parties**".

RECITALS

- A. Merck holds intellectual property rights with respect to the Merck Compound (as defined below).
- B. FLX is developing the FLX Compound (as defined below) for the treatment of certain tumor types.
- C. Merck is developing the Merck Compound for the treatment of certain tumor types.
- D. FLX desires to sponsor a clinical trial in which the FLX Compound and the Merck Compound would be dosed concurrently or in combination.
- E. Merck and FLX, consistent with the terms of this Agreement, desire to collaborate as more fully described herein, including by providing the Merck Compound and the FLX Compound for the Study (as defined below) and subject to the Parties' mutual agreement to proceed with the Study after review of the Clinical Safety Data (as defined below).

NOW, THEREFORE, in consideration of the premises and of the following mutual promises, covenants and conditions, the Parties, intending to be legally bound, mutually agree as follows:

Definitions.

For all purposes of this Agreement, the capitalized terms defined in this <u>Article 1</u> and throughout this Agreement shall have the meanings herein specified.

- 1.1. "Affiliate" means, with respect to either Party, a firm, corporation, partnership, or other entity that, now or hereafter, directly or indirectly owns or controls said Party, or, now or hereafter, is owned or controlled by said Party, or is under common ownership or control with said Party. The word "control" as used in this definition means (a) the direct or indirect ownership of fifty percent (50%) or more of the outstanding voting securities of a legal entity, or (b) possession, directly or indirectly, of the power to direct the management or policies of a legal entity, whether through the ownership of voting securities, contract rights, voting rights, corporate governance or otherwise.
 - 1.2. "Agreement" means this agreement, as amended by the Parties from time to time, and as set forth in the preamble.

- 1.3. "Alliance Manager" has the meaning set forth in Section 3.11.3.
- 1.4. "Applicable Law" means all federal, state, local, national and regional statutes, laws, rules, regulations and directives applicable to a particular activity hereunder, including performance of clinical trials, medical treatment and the processing and protection of personal and medical data, that may be in effect from time to time, including those promulgated by the United States Food and Drug Administration ("FDA"), national regulatory authorities, the European Medicines Agency ("EMA") and any successor agency to the FDA or EMA or any agency or authority performing some or all of the functions of the FDA or EMA in any jurisdiction outside the United States or the European Union (each a "Regulatory Authority" and collectively, "Regulatory Authorities"), and including cGMP and GCP (each as defined below); all data protection requirements such as those specified in the EU General Data Protection Regulation and the regulations issued under the United States Health Insurance Portability and Accountability Act of 1996 ("HIPAA"); export control and economic sanctions regulations which prohibit the shipment of United States-origin products and technology to certain restricted countries, entities and individuals; anti-bribery and anti-corruption laws pertaining to interactions with government agents, officials and representatives; laws and regulations governing payments to healthcare providers; and any United States or other country's or jurisdiction's successor or replacement statutes, laws, rules, regulations and directives relating to the foregoing.
- 1.5. "Business Day" means any day other than a Saturday, Sunday, or a day on which commercial banks located in the country where the applicable obligations are to be performed are authorized or required by law to be closed.
- 1.6. "**cGMP**" means the current Good Manufacturing Practices officially published and interpreted by EMA, FDA and other applicable Regulatory Authorities that may be in effect from time to time and are applicable to the Manufacture of the Compounds.
- 1.7. "Clinical Data" means all data (including raw data) and results, [***], generated by or on behalf of either Party or at either Party's direction, or by or on behalf of the Parties together or at their direction, in the course of each such Party's performance of the Study; [***].
 - 1.8. "Clinical Quality Agreement" has the meaning set forth in Section 8.2.
- 1.9. "Clinical Safety Data" means all safety-related data and results from the Monotherapy Arm [***] include safety reports containing information on adverse events, SAEs, and compilations and analyses to satisfy any FDA-reporting requirements, including summary tables of laboratory and radiographic data.
 - 1.10. "CMC" means "Chemistry Manufacturing and Controls" as such term of art is used in the pharmaceutical industry.
- 1.11. "Combination" means the use or method of using the FLX Compound and the Merck Compound in concomitant or sequential administration.
- 1.12. "Combination Data" means all data (including raw data) and results solely related to the Combination and generated by or on behalf of either Party or at either Party's direction, or by or on behalf of the Parties together or at their direction, in the course of each such Party's performance of the Study; [***].

- 1.13. "Comparative Data" means all data (including raw data) and results generated by or on behalf of either Party or at either Party's direction, or by or on behalf of the Parties together or at their direction, in evaluating or comparing the Combination Data and the Monotherapy Data, [***].
- 1.14. "Compounds" means the FLX Compound and the Merck Compound. A "Compound" means either the FLX Compound or the Merck Compound, as applicable.
- 1.15. "Confidential Information" means any information, Know-How or other proprietary information or materials furnished to one Party ("Receiving Party") by or on behalf of the other Party ("Disclosing Party") in connection with this Agreement, except to the extent that such information or materials: (a) was already known to the Receiving Party, other than under an obligation of confidentiality, at the time of disclosure by the Disclosing Party, as demonstrated by competent evidence; (b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the Receiving Party; (c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the Receiving Party in breach of this Agreement; (d) was disclosed to the Receiving Party by a Third Party who had no obligation to the Disclosing Party not to disclose such information to others; or (e) was subsequently developed by the Receiving Party without use of the Disclosing Party Confidential Information, as demonstrated by competent evidence.
 - 1.16. "**Continuing Party**" has the meaning set forth in <u>Section 10.1.1(c)</u>.
- 1.17. **"Control"** or **"Controlled"** means, with respect to particular information or intellectual property, that the applicable Party owns or has a license to such information or intellectual property and has the ability to grant a right, license or sublicense to the other Party as provided for herein without violating the terms of any agreement or other arrangement with any Third Party.
 - 1.18. "CTA" means an application to a Regulatory Authority for purposes of requesting the ability to start or continue a clinical trial.
 - 1.19. "Data Sharing and Sample Testing Schedule" means the schedule attached hereto as Schedule I.
 - 1.20. "**Defending Party**" has the meaning set forth in <u>Section 14.2.3</u>.
- 1.21. "**Delivery**" with respect to the Merck Compound has the meaning set forth in <u>Section 8.4.1</u>, and with respect to the FLX Compound, the meaning set forth in <u>Section 8.4.2</u>. "**Delivered**" has a correlative meaning.
 - 1.22. "Direct Manufacturing Costs" has the meaning set forth in Section 6.12.
 - 1.23. "Disclosing Party" has the meaning set forth in the definition of Confidential Information.

- 1.24. "Disposition Package" has the meaning set forth in Section 8.8.1.
- 1.25. "Effective Date" has the meaning set forth in the preamble.
- 1.26. **"EMA"** has the meaning set forth in the definition of Applicable Law.
- 1.27. "Enforcing Party" has the meaning set forth in Section 10.1.2(e).
- 1.28. "Exclusions List" has the meaning set forth in the definition of Violation.
- 1.29. "FDA" has the meaning set forth in the definition of Applicable Law.
- 1.30. "**Filing Party**" has the meaning set forth in <u>Section 10.1.1(c)</u>.
- 1.31. **"Final Study Report"** has the meaning set forth in <u>Section 3.12.2</u>.
- 1.32. "FLX" has the meaning set forth in the preamble.
- 1.33. "FLX Background Patents" has the meaning set forth in Section 10.4.1.
- 1.34. "FLX Class Compound" means any small or large molecule that binds to CCR4 or CCR4 ligands.
- 1.35. "FLX Compound" means the small molecule currently designated by FLX as "FLX475", [***].
- 1.36. "FLX Inventions" has the meaning set forth in Section 10.2.
- 1.37. **"Force Majeure"** has the meaning set forth Article 16.
- 1.38. "GAAP" has the meaning set forth in Section 6.12.
- 1.39. "GCP" means the Good Clinical Practices officially published by EMA, FDA and the International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH) that may be in effect from time to time and are applicable to the testing of the Compounds.
- 1.40. "Government Official" means: (a) any officer or employee of a government or any department, agency or instrument of a government; (b) any Person acting in an official capacity for or on behalf of a government or any department, agency, or instrument of a government; (c) any officer or employee of a company or business owned in whole or part by a government; (d) any officer or employee of a public international organization such as the World Bank or United Nations; (e) any officer or employee of a political party or any Person acting in an official capacity on behalf of a political party; and/or (f) any candidate for political office; who, when such Government Official is acting in an official capacity, or in an official decision-making role, has responsibility for performing regulatory inspections, government authorizations or licenses, or otherwise has the capacity to make decisions with the potential to affect the business of either of the Parties.

- 1.41. "HIPAA" has the meaning set forth in the definition of Applicable Law.
- 1.42. "IND" means any Investigational New Drug Application filed or to be filed with the FDA as described in Title 21 of the U.S. Code of Federal Regulations, Part 312, and the equivalent application in the jurisdictions outside the United States, including an "Investigational Medicinal Product Dossier" filed or to be filed with Regulatory Authorities in the European Union.
 - 1.43. "**Indirect Manufacturing Costs**" has the meaning set forth in Section 6.12.
- 1.44. "**Inventions**" means all inventions and discoveries, whether or not patentable, that are made, conceived, or first actually reduced to practice by or on behalf of a Party, or by or on behalf of the Parties together, (a) in the design or performance of the Study or in the design or performance of any Subsequent Study performed pursuant to <u>Section 3.15</u>, (b) through use of unpublished Clinical Data, or (c) through use of Sample Testing Results that are shared between the Parties pursuant to the Data Sharing and Sample Testing Schedule.
 - 1.45. "Joint Development Committee" or "JDC" has the meaning set forth in Section 3.11.1.
 - 1.46. "Joint Patent Application" has the meaning set forth in Section 10.1.1(c).
 - 1.47. "Joint Patent" means a Patent that issues from a Joint Patent Application.
 - 1.48. "Jointly Owned Invention" has the meaning set forth in Section 10.1.1(a).
- 1.49. "**Know-How**" means any proprietary invention, innovation, improvement, development, discovery, computer program, device, trade secret, method, know-how, process, technique or the like, including manufacturing, use, process, structural, operational and other data and information, whether or not written or otherwise fixed in any form or medium, regardless of the media on which contained and whether or not patentable or copyrightable, that is not generally known or otherwise in the public domain.
 - 1.50. "Liability" has the meaning set forth in Section 14.2.1.
- 1.51. "Manufacture," "Manufactured," or "Manufacturing" means all activities related to the manufacture of a Compound, including planning, purchasing, manufacture, processing, compounding, storage, filling, packaging, waste disposal, labeling, leafleting, testing, quality assurance, sample retention, stability testing, release, dispatch and supply, as applicable.
 - 1.52. "Manufacturer's Release" or "Release" has the meaning ascribed to such term in the Clinical Quality Agreement.
- 1.53. "**Manufacturing Site**" means the facilities where a Compound is Manufactured by or on behalf of a Party, as such Manufacturing Site may change from time to time in accordance with <u>Section 8.7</u>.
 - 1.54. "Merck" has the meaning set forth in the preamble.

- 1.55. "Merck Background Patents" has the meaning set forth in Section 10.4.2.
- 1.56. "Merck Compound" means pembrolizumab, a humanized anti-human PD-1 monoclonal antibody, [***].
- 1.57. "Merck Inventions" has the meaning set forth in Section 10.3.
- 1.58. **"Monotherapy Arm"** means the arm(s) of the Study intended to evaluate the safety, pharmacokinetics, pharmacodynamics, and/or preliminary efficacy of the FLX Compound as a monotherapy in patients with advanced cancer. For clarity, references to the Monotherapy Arm in this Agreement refer solely to the specific arm(s) of the Study where the FLX Compound is dosed alone.
- 1.59. "**Monotherapy Data**" means all data (including raw data) and results generated by FLX in the course of FLX's performance of the Monotherapy Arm of the Study; [***].
- 1.60. "NDA" means a New Drug Application, Biologics License Application, Marketing Authorization Application, filing pursuant to Section 510(k) of the United States Federal Food, Drug and Cosmetic Act, or similar application or submission for a marketing authorization of a product filed with a Regulatory Authority to obtain marketing approval for a biological, pharmaceutical or diagnostic product in that country or in that group of countries.
 - 1.61. "Non-Enforcing Party" has the meaning set forth in Section 10.1.2(e).
- 1.62. "**Non-Conformance**" means, with respect to a given unit of Compound, (a) an event that deviates from an approved cGMP requirement with respect to the applicable Compound, such as a procedure, Specification, or operating parameter, or that requires an investigation to assess impact to the quality of the applicable Compound or (b) that such Compound failed to meet the applicable representations and warranties set forth in <u>Section 2.3</u>. Classification of the Non-Conformance is detailed in the Clinical Quality Agreement.
 - 1.63. "Non-Filing Party" has the meaning set forth in Section 10.1.1(c).
 - 1.64. "Other Party" has the meaning set forth in Section 14.2.3.
 - 1.65. "Opting-out Party" has the meaning set forth in Section 10.1.1(c).
 - 1.66. "**Party**" has the meaning set forth in the preamble.
- 1.67. **"Patent"** means a patent, extension, registration, supplementary protection certificate or the like that issues from a given Patent Application.
- 1.68. **"Patent Application"** means a patent application (including any provisional, substitution, divisional, continuation, continuation in part, reissue, renewal, reexamination, extension, supplementary protection certificate and the like) in respect of a given invention.
 - 1.69. "PD-1 Antagonist" means [***].

- 1.70. **"Person"** means any individual, sole proprietorship, partnership, corporation, business trust, joint stock company, trust, unincorporated organization, association, limited liability company, institution, public benefit corporation, joint venture, entity or governmental entity.
 - 1.71. "Pharmacovigilance Agreement" has the meaning set forth in Section 5.1.
 - 1.72. "**Project Manager**" has the meaning set forth in Section 3.11.1.
- 1.73. **"Protocol"** means the written documentation that describes the Study and sets forth specific activities to be performed as part of the conduct of the Study. The initial Protocol is set forth in <u>Appendix A</u>.
 - 1.74. "Receiving Party" has the meaning set forth in the definition of Confidential Information.
- 1.75. "**Regulatory Approvals**" means, with respect to a Compound, any and all permissions (other than the Manufacturing approvals) required to be obtained from Regulatory Authorities and any other competent authority for the development, registration, importation, use (including use in clinical trials) and distribution of such Compound in the United States, Europe or other applicable jurisdictions for use in the Study.
 - 1.76. "Regulatory Authorities" has the meaning set forth in the definition of Applicable Law.
- 1.77. "Regulatory Documentation" means, with respect to a Compound or Compounds, all submissions to Regulatory Authorities in connection with the development of such Compound(s), including all INDs and amendments thereto, NDAs and amendments thereto, drug master files, correspondence with regulatory agencies, periodic safety update reports, adverse event files, complaint files, inspection reports and manufacturing records, in each case together with all supporting documents (including documents that include Clinical Data).
 - 1.78. "Related Agreements" means the Pharmacovigilance Agreement and the Clinical Quality Agreement.
- 1.79. "Right of Reference" means the "right of reference" defined in 21 CFR 314.3(b), including with regard to a Party, allowing the applicable Regulatory Authority in a country to have access to relevant information (by cross-reference, incorporation by reference or otherwise) contained in Regulatory Documentation (and any data contained therein) filed with such Regulatory Authority with respect to a Party's Compound, only to the extent necessary for the conduct of the Study in such country or as otherwise expressly permitted or required under this Agreement to enable a Party to exercise its rights or perform its obligations hereunder.
 - 1.80. "SAEs" has the meaning set forth in Section 5.2.
 - 1.81. "Samples" means biological specimens collected from subjects participating in the Study, including urine, blood and tissue samples.

- 1.82. "Sample Testing" means the analyses to be performed by each Party using the applicable Samples, as described in the Data Sharing and Sample Testing Schedule.
 - 1.83. "Sample Testing Results" means those data and results arising from the Sample Testing performed by a Party.
- 1.84. "Specifications" means, with respect to a given Compound, the set of requirements for such Compound as set forth in the Clinical Quality Agreement.
- 1.85. "**Study**" means the Phase I/II clinical trial described in the Protocol to evaluate the safety, pharmacokinetics, pharmacodynamics, and/or preliminary efficacy of: (A) the FLX Compound as a monotherapy; and (B) the Combination in patients with advanced cancer.
 - 1.86. "Study Completion" means database lock of the Study results.
 - 1.87. "Subcontractors" has the meaning set forth in Section 2.4.
 - 1.88. "Subsequent Study" has the meaning set forth in Section 3.15.1.
 - 1.89. "**Term**" has the meaning set forth in <u>Section 6.1</u>.
 - 1.90. "Third Party" means any Person or entity other than FLX, Merck or their respective Affiliates.
 - 1.91. "Third Party Infringement" has the meaning set forth in Section 10.1.2(a).
 - 1.92. "**Top-Line Data**" has the meaning set forth in <u>Section 3.8.3</u>.
 - 1.93. "**Top-Line Results Memo**" has the meaning set forth in <u>Section 3.12.1</u>.
 - 1.94. "Toxicity & Safety Data" means all clinical adverse event information and/or patient-related safety data [***].
 - 1.95. "**Transparency Report**" has the meaning set forth in <u>Section 4.3.3</u>.
 - 1.96. "VAT" has the meaning set forth in Section 8.16.1.
- 1.97. "Violation" means that a Party or any of its officers or directors or any other personnel (or other permitted agents of a Party performing activities hereunder) has been: (a) convicted of any of the felonies identified among the exclusion authorities listed on the U.S. Department of Health and Human Services, Office of Inspector General (OIG) website, including 42 U.S.C. 1320a-7(a) (http://oig.hhs.gov/exclusions/authorities.asp); (b) identified in the OIG List of Excluded Individuals/Entities (LEIE) database (http://exclusions.oig.hhs.gov/) or listed as having an active exclusion in the System for Award Management (http://www.sam.gov); or (c) listed by any US Federal agency as being suspended, proposed for debarment, debarred, excluded or otherwise ineligible to participate in Federal procurement or non-procurement programs, including under 21 U.S.C. 335a (http://www.fda.gov/ora/compliance_ref/debar/) (the lists in (a), (b) and (c) collectively, the "Exclusions Lists").

2. Scope of the Agreement.

2.1. Generally.

- 2.1.1. Each Party shall: (a) contribute to the Study such resources as are necessary to fulfill its obligations set forth in this Agreement; and (b) act in good faith in performing its obligations under this Agreement and each Related Agreement to which it is a Party.
- 2.1.2. Prior to dosing any patient in the Combination arm(s) of the Study (as currently set forth in Parts 1b and 2b of the Protocol) and in any event [***], FLX shall convene a meeting or teleconference, during regular business hours, to review the Clinical Safety Data. FLX shall provide Merck with reasonable advance notice of, and invite Merck to attend, such meeting or teleconference, as applicable. [***], Merck shall have the opportunity to review the Clinical Safety Data. FLX shall also provide Merck with a copy of the Clinical Safety Data for further review. Promptly following Merck's review of such Clinical Safety Data, but in no event later than [***] days after receipt of such Clinical Safety Data, the JDC shall meet and discuss whether to proceed with the Study. [***].
- 2.2. <u>Manufacturing Delay.</u> Each Party shall notify the other Party as promptly as possible in the event of any Manufacturing delay that is likely to adversely affect supply of its Compound as contemplated by this Agreement.

2.3. Compound Commitments.

- 2.3.1. FLX agrees to Manufacture and supply the FLX Compound for purposes of the Study in accordance with <u>Article 8</u>, and FLX hereby represents and warrants to Merck that, at the time of Delivery of the FLX Compound, such FLX Compound shall have been Manufactured and supplied in compliance with: (a) the Specifications for the FLX Compound; (b) the Clinical Quality Agreement; and (c) all Applicable Law, including cGMP and health, safety and environmental protections.
- 2.3.2. Merck agrees to Manufacture and supply the Merck Compound for purposes of the Study in accordance with Article 8, and Merck hereby represents and warrants to FLX that, at the time of Delivery of the Merck Compound, such Merck Compound shall have been Manufactured and supplied in compliance with: (a) the Specifications for the Merck Compound; (b) the Clinical Quality Agreement; and (c) all Applicable Law, including cGMP and health, safety and environmental protections.
- 2.3.3. Without limiting the foregoing, each Party is responsible for obtaining all regulatory approvals (including facility licenses) that are required to Manufacture its Compound in accordance with Applicable Law (*provided* that, for clarity, FLX shall be responsible for obtaining Regulatory Approvals for the Study as set forth in <u>Section 3.4</u>).
- 2.4. <u>Delegation of Obligations</u>. Each Party shall have the right to delegate any portion of its obligations hereunder as follows: (a) to such Party's Affiliates; (b) to Third Parties that are

set forth in the Protocol as performing Study activities or as conducting Sample Testing for such Party; (c) to Third Parties to the extent related to the Manufacture of such Party's Compound; and/or (d) to Third Parties upon the other Party's prior written consent, [***]. Any and all Third Parties to whom a Party delegates any of its obligations hereunder are referred to as "Subcontractors". Notwithstanding any delegation of its obligations hereunder, each Party shall remain solely and fully liable for the performance of its Affiliates and Subcontractors to which such Party delegates the performance of its obligations under this Agreement. Each Party shall ensure that each of its Affiliates and Subcontractors performs such Party's obligations pursuant to the terms of this Agreement, including the Appendices and Schedules attached hereto, and Related Agreements. Each Party shall use reasonable efforts to obtain and maintain copies of documents relating to the obligations performed by such Affiliates and Subcontractors that are required to be provided to the other Party under this Agreement.

2.5. <u>Compounds</u>. [***], this Agreement does not create any obligation on the part of Merck to provide the Merck Compound for any activities other than the Study, nor does it create any obligation on the part of FLX to provide the FLX Compound for any activities other than the Study.

3. <u>Conduct of the Study</u>.

- 3.1. <u>Sponsor</u>. FLX shall be the sponsor of the Study under its existing IND for the FLX Compound with a Right of Reference to the IND of the Merck Compound, as necessary, as further described in <u>Section 3.4</u>; *provided*, *however*, that in no event shall FLX file an additional IND for the Study unless required by Regulatory Authorities to do so. If a Regulatory Authority requests an additional IND for the Study the Parties shall meet and mutually agree on an approach to address such requirement.
- 3.2. *Performance*. FLX shall ensure that the Study is performed in accordance with this Agreement, the Protocol and all Applicable Law, including GCP.
 - 3.3. <u>Debarred Personnel; Exclusions Lists</u>. [***].
- 3.4. <u>Regulatory Matters</u>. FLX shall: (a) obtain, prior to initiating the Study, all Regulatory Approvals from all Regulatory Authorities, ethics committees and/or institutional review boards with jurisdiction over the Study; and (b) follow all directions from any such Regulatory Authorities, ethics committees and/or institutional review boards. [***]. If a Right of Reference is necessary, each Party shall provide to the other a cross-reference letter or similar communication to the applicable Regulatory Authority if needed to effectuate the Right of Reference (including a Right of Reference to the Monotherapy Data solely to the extent necessary or useful in connection with regulatory approval of a Compound in the Combination). Notwithstanding anything to the contrary in this Agreement, neither Party shall have any right to [***] with respect to such other Party's Compound. Merck shall authorize the FDA and other applicable Regulatory Authorities to cross-reference the appropriate Merck Compound INDs and CTAs to provide data access to FLX sufficient to support conduct of the Study. If Merck's CTA is not available in a given country, Merck will [***] with the Regulatory Authority for such country, referencing FLX's CTA as appropriate (however, FLX shall [***].

- 3.5. <u>Documentation</u>. FLX shall maintain reports related to the Study and all related documentation in good scientific manner and in compliance with Applicable Law. FLX shall provide to Merck all Study information and documentation ([***]) requested by Merck to enable Merck to (a) comply with any of its legal, regulatory and/or contractual obligations, or any request by any Regulatory Authority, related to the Merck Compound and (b) determine whether the Study has been performed in accordance with this Agreement. If requested by Merck for purposes of complying with Applicable Law, any submissions or responses to Regulatory Authorities, [***] FLX shall work in good faith with Merck to provide required access to [***] information and documentation, including [***], or otherwise make available under Applicable Law or to the Regulatory Authority directly for such purposes.
- 3.6. <u>Copies</u>. FLX shall provide to Merck copies of all Clinical Data [***], in electronic form or other mutually agreeable alternate form and on the timelines specified in the Data Sharing and Sample Testing Schedule (if applicable) or upon mutually agreeable timelines; *provided*, *however*, that a complete copy of the Clinical Data [***], shall be provided to Merck no later than [***] days following Study Completion. FLX shall ensure that all patient authorizations and consents required under HIPAA, the EU General Data Protection Regulation or any other similar Applicable Law in connection with the Study permit such sharing of Clinical Data [***] with Merck. The Parties shall comply with any Applicable Law relating to processing of personal data in connection with the Clinical Data [***].

3.7. Sample Testing.

- 3.7.1. FLX shall provide Samples to Merck as specified in the Protocol or as agreed to by the Joint Development Committee. Each Party shall (a) use the Samples only for the Sample Testing and (b) conduct the Sample Testing solely in accordance with the Data Sharing and Sample Testing Schedule and the Protocol.
- 3.7.2. Merck shall own all Sample Testing Results arising from Sample Testing performed by or on behalf of Merck. Solely to the extent specified on the Data Sharing and Sample Testing Schedule as being shared, [***] the Sample Testing Results for the Sample Testing conducted [***], in electronic form or other mutually agreeable alternate form, on the timelines specified in the Data Sharing and Sample Testing Schedule or as otherwise mutually agreed.
- 3.7.3. FLX shall own all Sample Testing Results arising from Sample Testing performed by or on behalf of FLX. Solely to the extent specified on the Data Sharing and Sample Testing Schedule as being shared, [***] the Sample Testing Results for the Sample Testing conducted [***], in electronic form or other mutually agreeable alternate form, on the timelines specified in the Data Sharing and Sample Testing Schedule or as otherwise mutually agreed.
- 3.7.4. Except to the extent otherwise agreed in a writing signed by authorized representatives of each Party, each Party may use and disclose the Sample Testing Results [***] in accordance with the Data Sharing and Sample Testing Schedule solely for the purposes of: [***]

3.8. Ownership and Use of Clinical Data.

3.8.1. All Clinical Data shall be jointly owned by FLX and Merck. Merck hereby assigns to FLX an undivided one-half interest in, to and under the Clinical Data. FLX hereby assigns to Merck an undivided one-half interest in, to and under the Clinical Data. [***]. FLX shall maintain the Clinical Data in its internal database; *provided*, *however*, that at all times during the Term, FLX shall [***] all Clinical Data [***].

3.8.2. Notwithstanding the foregoing, before publication of the Clinical Data in accordance with <u>Article 12</u>, neither Party may disclose the Clinical Data publicly or to a Third Party without the consent of the other Party and each Party's use of such unpublished Clinical Data is restricted to: [***]; provided, however, that the foregoing shall not limit or restrict either Party's ability to [***].

3.8.3. [***].

- 3.9. Ownership and Use of Monotherapy Data. All Monotherapy Data shall be owned by FLX. [***].
- 3.9.1. Before publication by FLX of the Monotherapy Data, [***] (a) [***]; provided, however, that the foregoing shall not limit or restrict [***] ability to [***]. For clarity, after publication by FLX of Monotherapy Data, the above restrictions shall continue to apply to any such Monotherapy Data that has not been publicly disclosed.
- 3.10. <u>Regulatory Submission</u>. It is understood and acknowledged by the Parties that positive Clinical Data could be used to obtain label changes for the Compounds, and each Party may propose a Subsequent Study (as defined below) in connection therewith in accordance with Section 3.15.
 - 3.11. Joint Development Committee; Alliance Managers.
- 3.11.1. The Parties shall form a joint development committee (the "**Joint Development Committee**" or "**JDC**") made up of an equal number of representatives of Merck and FLX, which shall have responsibility for coordinating all regulatory and other activities under, and pursuant to, this Agreement. The JDC will review and finalize the Protocol in accordance with <u>Section 4.1</u> and review and discuss the Clinical Safety Data in accordance with <u>Section 2.1.2</u>. Each Party shall designate a project manager (the "**Project Manager**") who shall be responsible for implementing and coordinating activities and facilitating the exchange of information between the Parties with respect to the Study and shall be a member of the JDC. Other JDC members will be agreed by both Parties. Each Party may replace its Project Manager and other JDC members upon notice to the other Party.
- 3.11.2. The JDC shall meet as soon as practicable after the Effective Date and then no less than [***], and more often as reasonably considered necessary at the request of either Party, to provide an update on the progress of the Study. The JDC may meet in person or by means of teleconference, Internet conference, videoconference or other similar communications equipment. Prior to any such meeting, FLX's Project Manager shall provide an update in writing to Merck's Project Manager, which update shall contain information about the overall progress of the Study, recruitment status, interim analysis (if results available), final analysis and other information relevant to the conduct of the Study.
- 3.11.3. In addition to a Project Manager, each Party shall designate an alliance manager (the "Alliance Manager"), who shall endeavor to ensure clear and responsive communication between the Parties and the effective exchange of information and shall serve as the primary point of contact for any issues arising under this Agreement. The Alliance Managers shall have the right to attend all JDC meetings and may bring to the attention of the JDC any

matters or issues either of them reasonably believes should be discussed and shall have such other responsibilities as the Parties may mutually agree in writing. Each Party may replace its Alliance Manager upon notice to the other Party. In the event that an issue arises and the Alliance Managers cannot or do not, after good faith efforts, reach agreement on such issue, or if there is a decision to be made by the JDC on which the members of the JDC cannot unanimously agree, the issue shall be elevated to the [***] for Merck and the Chief Executive Officer for FLX. In the event such escalation does not result in resolution or consensus: [***] unless mutually agreed otherwise by the Parties in writing through the JDC.

- 3.12. <u>Certain Memoranda and Reports</u>. Without limiting any other provision of this Agreement requiring FLX to provide to Merck documentation related to the Study, FLX shall provide to Merck drafts and final versions of: (a) a memorandum having top-line results from the completed Study (the "**Top-Line Results Memo**"); and (b) final Study report ("**Final Study Report**") for the Study as described below.
- 3.12.1. **Top-Line Results Memo**. Promptly following Study Completion, FLX shall provide to Merck an electronic draft of the Top-Line Results Memo, and Merck shall have [***] days after receipt of such draft to provide comments thereon. FLX shall consider in good faith any comments provided by Merck on the Top-Line Results Memo and shall not include any statements therein relating to the Merck Compound that have not been approved by Merck. FLX shall deliver to Merck a final version of the Top-Line Results Memo promptly following finalization thereof.
- 3.12.2. **Final Study Report**. FLX shall provide Merck with an electronic draft of the final Study report promptly following Study Completion, and Merck shall have [***] days after receipt of such draft to provide comments thereon. FLX shall consider in good faith any comments provided by Merck on the draft final Study report and shall not include any statements therein relating to the Merck Compound that have not been approved by Merck. FLX shall deliver to Merck a final version of the final Study report promptly following finalization thereof (the "**Final Study Report**").
- 3.13. <u>Relationship</u>. Except as expressly set forth in this Agreement, nothing in this Agreement shall: [***]; or (b) create an exclusive relationship between the Parties with respect to any Compound. Each Party acknowledges and agrees that nothing in this Agreement shall be construed as a representation or inference that the other Party will not develop for itself, or enter into business relationships with other Third Parties regarding, any products, programs, studies (including combination studies), technologies or processes that are similar to or that may compete with the Combination or any other product, program, technology or process, including [***] are not used or disclosed in connection therewith in violation of this Agreement.
- 3.14. *Licensing*. Nothing in this Agreement shall prohibit or restrict a Party from licensing, assigning or otherwise transferring to an Affiliate or Third Party such Party's Compound or any Inventions, Confidential Information or Sample Testing Results owned solely by such Party. A Party may license, assign or transfer to an Affiliate or Third Party such Party's interest in the Clinical Data, Confidential Information owned jointly by the Parties and/or Jointly Owned Inventions, and in connection therewith share the shared Sample Testing Results owned by the other Party, solely to the extent such licensee, assignee or transferee agrees in writing to be bound by the terms of this Agreement with respect to such Clinical Data, Monotherapy Data, Confidential Information, Jointly Owned Inventions, and shared Sample Testing Results. For purposes of clarity, any assignment or transfer of this Agreement must comply with Article 18 of this Agreement.

3.15. <u>Subsequent Study</u>.

- 4. Protocol, Statistical Analysis Plan and Informed Consent; Certain Covenants.
- 4.1. Protocol and Statistical Analysis Plan. An initial Protocol and a draft statistical analysis plan for the Study have been agreed to by the Parties as of the Effective Date and are attached hereto as Appendix A. Through the JDC, FLX shall (a) provide any proposed revisions to the then current Protocol or statistical analysis plan to Merck for Merck's review and comment, (b) consider in good faith any changes requested by Merck, and (c) incorporate any changes requested by Merck with respect to Merck Compound. FLX shall then submit the proposed revised Protocol or statistical analysis plan, as applicable, to the JDC for approval. To the extent the JDC cannot agree unanimously regarding the Protocol or statistical analysis plan for final approval: (i) [***] shall have final decision-making authority with respect to matters related to [***] (including with respect to [***]); and (iii) all other matters on which the JDC cannot agree shall be resolved in accordance with Section 3.11.3. Once the final Protocol or statistical analysis plan has been approved in accordance with this Section 4.1, Merck's prior written consent shall be required for: (i) any [***] changes to such approved final Protocol or statistical analysis plan [***] relating to [***]. Any such proposed changes will be sent in writing to Merck's Project Manager and Merck's Alliance Manager.
- 4.1.1. Notwithstanding anything to the contrary contained herein, [***], in its sole discretion, shall have the sole right to determine [***] and shall have the final decision on all matters relating to [***] (including [***]) and any information regarding [***].
- 4.1.2. Notwithstanding anything to the contrary contained herein, [***], in its sole discretion, shall have the sole right to determine [***] and shall have the final decision on all matters relating to [***] (including [***]), [***], and any information regarding [***].
- 4.2. <u>Informed Consent</u>. FLX shall prepare the patient informed consent form for the Study (which shall include provisions regarding the use of Samples in Sample Testing) in consultation with Merck (it being understood and agreed that the portion of the informed consent form relating to the Sample Testing of the Merck Compound shall be provided to FLX by Merck). Any proposed changes to such form that relate to the Merck Compound, including Sample Testing of the Merck Compound, shall be subject to Merck's prior written consent. Any such proposed changes will be sent in writing to Merck's Project Manager and Merck's Alliance Manager. [***].

4.3. Transparency Reporting.

- 4.3.1. With respect to any annual reporting period in which FLX is not an entity that is required to make a Transparency Report under Applicable Law, FLX will: (a) notify Merck, in writing, within [***] days after the commencement of such reporting period that FLX is not so required; and (b) during such reporting period FLX will track and provide to Merck data regarding "indirect" payments or other transfers of value by FLX to such health care professionals to the extent such payments or other transfers of value were required, instructed, directed or otherwise caused by Merck pursuant to this Agreement in the format requested by Merck and provided on a basis to be agreed upon by both Parties. FLX represents and warrants that any data provided by FLX to Merck pursuant to Section 4.3.1(b) above will be complete and accurate to the best of FLX's knowledge.
- 4.3.2. With respect to any annual reporting period in which FLX is required to make a Transparency Report under Applicable Law, FLX will provide to Merck, in writing, FLX's point of contact for purposes of receiving information from Merck pursuant to this Section 4.3, along with such contact's full name, email address, and telephone number. FLX may update such contact from time to time by notifying Merck in writing pursuant to Article 22 (Notices). Where applicable, Merck will provide to such FLX contact all information regarding the value of the Merck Compound provided for use in the Study required for such reporting. In the event that the value of the Merck Compound provided pursuant to this Section 4.3.2 changes, Merck shall notify FLX of such revised value and the effective date thereof.
- 4.3.3. For purposes of this Section 4.3, "**Transparency Report**" means a transparency report in connection with reporting payments and other transfers of value made to health care professionals, including, without limitation, investigators, steering committee members, data monitoring committee members, and consultants in connection with the Study in accordance with reporting requirements under Applicable Law, including, without limitation, the Physician Payment Sunshine Act and state gift laws, and the European Federation of Pharmaceutical Industries and Associations Disclosure Code, or a Party's applicable policies.

5. Adverse Event Reporting.

5.1. Pharmacovigilance Agreement. FLX will be solely responsible for compliance with all Applicable Laws pertaining to safety reporting for the Study and related activities. The Parties (or their respective Affiliates) will execute a pharmacovigilance agreement (the "Pharmacovigilance Agreement") prior to the initiation of clinical activities under the Study, but in any event within [***] days after the Effective Date, to ensure the exchange of relevant safety data within appropriate timeframes and in an appropriate format to enable the Parties to fulfill local and international regulatory reporting obligations and to facilitate appropriate safety reviews. In the event of any inconsistency between the terms of this Agreement and the Pharmacovigilance Agreement, [***]. The Pharmacovigilance Agreement will include safety data exchange procedures governing the coordination of collection, investigation, reporting, and exchange of information concerning any adverse experiences, pregnancy reports, and any other safety information arising from or related to the use of the Merck Compound [***] in the Study, consistent with Applicable Law. Such guidelines and procedures shall be in accordance with, and enable the Parties and their Affiliates to fulfill, local and international regulatory reporting obligations to Regulatory Authorities.

- 5.2. <u>Transmission of SAEs</u>. FLX will transmit to Merck all serious adverse events ("SAEs") [***]:
- 5.2.1. For drug-related fatal and life-threatening SAEs, FLX will send a processed case (on a CIOMS-1 form in English) within [***] by FLX of such SAEs.
- 5.2.2. For all other SAEs, including non-drug-related fatal and life-threatening SAEs, FLX will send a processed case (on a CIOMS-1 form in English) within [***] by FLX of such SAEs.

6. Term and Termination.

- 6.1. <u>Term</u>. The term of this Agreement shall commence on the Effective Date and shall continue in full force and effect until delivery of the Final Study Report, unless terminated earlier by either Party pursuant to this <u>Article 6</u> (the "**Term**").
- 6.2. <u>Merck Termination for Safety</u>. In the event that Merck in good faith believes that the Merck Compound is being used in the Study in an unsafe manner and notifies FLX in writing of the grounds for such belief, and FLX fails to promptly incorporate changes into the Protocol requested by Merck to address such issue or to otherwise address such issue reasonably and in good faith, Merck may terminate this Agreement and the supply of the Merck Compound immediately upon written notice to FLX.
- 6.3. <u>Termination for Material Breach</u>. Either Party may terminate this Agreement if the other Party commits a material breach of this Agreement, and such material breach continues for [***] after receipt of written notice thereof from the non-breaching Party; *provided* that if such material breach cannot reasonably be cured within [***], the breaching Party shall be given a reasonable period of time to cure such breach; *provided further*, that if such material breach is incapable of cure, then the notifying Party may terminate this Agreement effective after the expiration of such [***] period.
- 6.4. <u>Termination for Patient Safety</u>. If either Party determines in good faith, based on a review of the [***] or other information, that the Study may [***] affect patient safety, such Party shall promptly notify the other Party of such determination. The Party receiving such notice may propose modifications to the Study to address the safety issue identified by the other Party and, if the notifying Party agrees, shall act to implement immediately such modifications; *provided*, *however*, that if the notifying Party, in its sole discretion, believes that there is imminent danger to patients, such Party need not wait for the other Party to propose modifications and may instead terminate this Agreement immediately upon written notice to such other Party. Furthermore, if the notifying Party, in its sole discretion, believes that any modifications proposed by the other Party will not resolve the patient safety issue, such Party may terminate this Agreement effective upon written notice to such other Party.
- 6.5. <u>Termination for Regulatory Action; Other Reasons</u>. Either Party may terminate this Agreement immediately upon written notice to the other Party in the event that any Regulatory

Authority takes any action, or raises any objection, that prevents the terminating Party from supplying its Compound for purposes of the Study. Additionally, either Party shall have the right to terminate this Agreement immediately upon written notice to the other Party in the event that it determines in its sole discretion to withdraw any applicable regulatory approval for its Compound or to discontinue development of its Compound, for medical, scientific or legal reasons.

- 6.6. <u>Termination related to Anti-Corruption Obligations</u>. Either Party shall have the right to terminate this Agreement immediately upon written notice to the other Party, if such other Party fails to perform any of its obligations under <u>Section 13.4</u> or breaches any representation or warranty contained in <u>Section 13.4</u>. Except as set forth in <u>Section [***]</u>, the non-terminating Party shall have no claim against the terminating Party for compensation for any loss of whatever nature by virtue of the termination of this Agreement in accordance with this Section 6.6.
- 6.7. <u>Return of Merck Compound</u>. In the event that this Agreement is terminated, or in the event FLX remains in possession (including through any Affiliate or Subcontractor) of Merck Compound at the time this Agreement expires, FLX shall, at Merck's sole discretion, promptly either return or destroy all unused Merck Compound pursuant to Merck's instructions; [***]. If Merck requests that FLX destroy the unused Merck Compound, FLX shall provide written certification of such destruction.
- 6.8. <u>Termination related to Clinical Safety Data</u>. In the event that either Party or both Parties make a No-Go Decision, this Agreement shall terminate immediately upon the date of such No-Go Decision. [***].
 - 6.9. *Survival*. The provisions [***].
- 6.10. *No Prejudice*. Termination of this Agreement shall be without prejudice to any claim or right of action of either Party against the other Party for any prior breach of this Agreement.
- 6.11. <u>Confidential Information</u>. Upon termination of this Agreement, each Receiving Party and its Affiliates shall promptly return to the Disclosing Party or destroy any Confidential Information of the Disclosing Party ([***]) furnished to the Receiving Party by the Disclosing Party; provided, however that the Receiving Party may retain one copy of such Confidential Information in its confidential files, solely for purposes of exercising the Receiving Party's rights hereunder, satisfying its obligations hereunder or complying with any legal proceeding or requirement with respect thereto, and provided further that the Receiving Party shall not be required to erase electronic files created in the ordinary course of business during automatic system back-up procedures pursuant to its electronic record retention and destruction practices that apply to its own general electronic files and information so long as such electronic files are (a) maintained only on centralized storage servers (and not on personal computers or devices), (b) not accessible by any of its personnel (other than its information technology specialists), and (c) are not otherwise accessed subsequently except with the written consent of the Disclosing Party or as required by law or legal process. Such retained copies of Confidential Information shall remain subject to the confidentiality and non-use obligations herein.

6.12. <u>Manufacturing Costs</u>. In the event of termination [***] pursuant to <u>Section</u> [***] above, Merck shall be entitled to reimbursement by FLX for the Direct Manufacturing Costs and Indirect Manufacturing Costs (as defined herein) incurred by Merck for its Compound Delivered for the Study. "**Direct Manufacturing Costs**" shall be calculated [***]. "**Indirect Manufacturing Costs**" shall be calculated [***].

7. Costs of Study.

The Parties agree that: (a) Merck shall provide the Merck Compound for use in the Study, as described in <u>Article 8</u> below; (b) each Party will be responsible for its own internal costs and expenses to support the Study and the costs of any Sample Testing conducted by such Party in connection with the Study; and (c) FLX shall bear all other costs associated with the conduct of the Study, including that FLX shall provide the FLX Compound for use in the Study, as described in <u>Article 8</u> below. For the avoidance of doubt, FLX will not be required to reimburse Merck for any costs or expenses incurred by Merck or its Affiliates in connection with the Study (except as provided in <u>Section 6.12</u>) and Merck will not be required to reimburse FLX for any costs or expenses incurred by FLX or its Affiliates in connection with the Study.

8. Supply and Use of the Compounds.

- 8.1. <u>Supply of the Compounds</u>. Subject to the terms and conditions of this Agreement, each of FLX and Merck will use commercially reasonable efforts to supply, or cause to be supplied, the quantities of its respective Compound as are set forth in <u>Appendix B</u>, on the timelines set forth in <u>Appendix B</u>, in each case for use in the Study. If the Protocol is changed in accordance with <u>Article 4</u> in such a manner that may affect the quantities of Compound to be provided or the timing for providing such quantities, the Parties shall amend <u>Appendix B</u> to reflect any changes required to be consistent with the Protocol. Each Party shall also provide to the other Party a contact person for the supply of its Compound under this Agreement. Notwithstanding the foregoing, or anything to the contrary herein, in the event that a Party is: (a) not supplying its Compound in accordance with the terms of this Agreement, then the other Party shall have no obligation to supply its Compound; or (b) allocating under <u>Section 8.10</u>, then the other Party may allocate proportionally.
- 8.2. <u>Clinical Quality Agreement</u>. [***], the Parties (or their respective Affiliates) shall enter into a quality agreement that shall address and govern issues related to the quality of clinical drug supply to be supplied by the Parties for use in the Study (the "Clinical Quality Agreement"). In the event of any inconsistency between the terms of this Agreement and the Clinical Quality Agreement, [***]. The Clinical Quality Agreement shall, among other things: (a) detail classification of any Compound found to have a Non-Conformance; (b) include criteria for Manufacturer's Release and related certificates and documentation; (c) include criteria and timeframes for acceptance of Merck Compound; (d) include procedures for the resolution of disputes regarding any Compounds found to have a Non-Conformance; and (e) include provisions governing the recall of Compounds.
- 8.3. <u>Minimum Shelf Life Requirements</u>. Each Party shall use commercially reasonable efforts to supply its Compound hereunder with an adequate remaining shelf life at the time of Delivery to meet the Study requirements.

8.4. Provision of Compounds.

8.4.1. Merck will deliver the Merck Compound [***] to FLX's, or its designee's, location as specified by FLX ("**Delivery**" with respect to such Merck Compound). Title and risk of loss for the Merck Compound shall transfer from Merck to FLX at Delivery. All costs associated with the subsequent transportation, warehousing and distribution of Merck Compound shall be borne by FLX. FLX will, or will cause its designee to: (a) take delivery of the Merck Compound supplied hereunder; (b) perform the acceptance (including testing) procedures allocated to it under the Clinical Quality Agreement; (c) subsequently label and pack the Merck Compound (in accordance with Section 8.5); and promptly ship the Merck Compound to the Study

sites for use in the Study, in compliance with cGMP, GCP and other Applicable Law and the Clinical Quality Agreement; and (d) provide, from time to time at the reasonable request of Merck, the following information [***]: any applicable chain of custody forms, in-transport temperature recorder(s), records and receipt verification documentation, such other transport or storage documentation as may be reasonably requested by Merck, and usage and inventory reconciliation documentation related to the Merck Compound.

- 8.4.2. FLX is solely responsible, at its own cost, for supplying (including all Manufacturing, acceptance and release testing) the FLX Compound for the Study, and the subsequent handling, storage, transportation, warehousing and distribution of the FLX Compound supplied hereunder. FLX shall ensure that all such activities are conducted in compliance with cGMP, GCP and other Applicable Law and the Clinical Quality Agreement. For purposes of this Agreement, the "**Delivery**" of a given quantity of the FLX Compound shall be deemed to occur when such quantity is packaged for shipment to a Study site.
 - 8.5. <u>Labeling and Packaging; Use, Handling and Storage</u>.
- 8.5.1. The Parties' obligations with respect to the labeling and packaging of the Compounds are as set forth in the Clinical Quality Agreement. Notwithstanding the foregoing or anything to the contrary contained herein, Merck shall provide the Merck Compound to FLX in the form of [***], and FLX shall be responsible for labeling, packaging and leafleting such Merck Compound in accordance with the terms and conditions of the Clinical Quality Agreement and otherwise in accordance with all Applicable Law, including cGMP, GCP, and health, safety and environmental protections.
- 8.5.2. FLX shall: (a) use the Merck Compound solely for purposes of performing the Study; (b) not use the Merck Compound in any manner that is inconsistent with this Agreement or for any commercial purpose; and (c) label, use, store, transport, handle and dispose of the Merck Compound in compliance with Applicable Law and the Clinical Quality Agreement, as well as all instructions of Merck. FLX shall not reverse engineer, reverse compile, disassemble or otherwise attempt to derive the composition or underlying information, structure or ideas of the Merck Compound, and in particular shall not analyze the Merck Compound by physical, chemical or biochemical means except as necessary to perform its obligations under the Clinical Quality Agreement.
- 8.6. *Product Specifications*. A certificate of analysis shall accompany each shipment of the Merck Compound to FLX. Upon written request of Merck, FLX shall provide Merck with a certificate of analysis for [***] shipment of FLX Compound used in the Study.
- 8.7. <u>Changes to Manufacturing</u>. Each Party may make changes from time to time to its Compound or the Manufacturing Site, *provided* that such changes shall be in accordance with the Clinical Quality Agreement.
 - 8.8. <u>Product Testing; Noncompliance</u>.
- 8.8.1. *After Manufacturer's Release*. After Manufacturer's Release of the Merck Compound and concurrently with Delivery of the Compound to FLX, Merck shall provide FLX with such certificates and documentation as are described in the Clinical Quality Agreement

("Disposition Package"). FLX shall, within the time defined in the Clinical Quality Agreement, perform, with respect to the Merck Compound, the acceptance (including testing) procedures allocated to it under the Clinical Quality Agreement. FLX shall be solely responsible for taking all steps necessary to determine that Merck Compound or FLX Compound, as applicable, is suitable for release before making such Merck Compound or FLX Compound, as applicable, available for human use, and Merck shall provide cooperation or assistance as reasonably requested by FLX in connection with such determination with respect to the Merck Compound. FLX shall be responsible for storage and maintenance of the Merck Compound until it is tested and/or released, which storage and maintenance shall be in compliance with (a) the Specifications for the Merck Compound, the Clinical Quality Agreement and Applicable Law and (b) any specific storage and maintenance requirements as may be provided by Merck from time to time. FLX shall be responsible for any failure of the Merck Compound to meet the Specifications to the extent caused by shipping, storage or handling conditions after Delivery to FLX hereunder.

8.8.2. Non-Conformance.

- (a) In the event that either Party becomes aware that any Compound may have a Non-Conformance, despite testing and quality assurance activities (including any activities conducted by the Parties under <u>Section 8.8.1</u>), such Party shall immediately notify the other Party in accordance with the procedures of the Clinical Quality Agreement. The Parties shall investigate any Non-Conformance in accordance with <u>Section 8.9</u> (Investigations) and any discrepancy between them shall be resolved in accordance with <u>Section 8.8.3</u>.
- (b) In the event that any proposed or actual shipment of the Merck Compound (or portion thereof) shall be agreed to have a Non-Conformance at the time of Delivery to FLX, then unless otherwise agreed to by the Parties, Merck shall replace such Merck Compound as is found to have a Non-Conformance (with respect to Merck Compound that has not yet been administered in the course of performing the Study). Unless otherwise agreed to by the Parties in writing, [***] with respect to any Merck Compound that is found to have a Non-Conformance at the time of Delivery shall be [***]; provided that, for clarity, [***]. In the event Merck Compound is lost or damaged [***], Merck shall provide additional Merck Compound (if available for the Study) to FLX; provided that [***] such replaced Merck Compound; and provided further that [***]. Except as set forth in the foregoing sentence, Merck shall have no obligation to provide replacement Merck Compound for any Merck Compound supplied hereunder other than such Merck Compound as has been agreed or determined to have a Non-Conformance at the time of Delivery to FLX.
- (c) FLX shall be responsible for, and Merck shall have no obligation or liability with respect to, any FLX Compound supplied hereunder that is found to have a Non-Conformance. FLX shall replace any FLX Compound as is found to have a Non-Conformance (with respect to FLX Compound that has not yet been administered in the course of performing the Study). Unless otherwise agreed to by the Parties in writing, [***] with respect to any FLX Compound that is found to have a Non-Conformance at the time of Delivery shall be [***]; provided that, for clarity, [***].

- 8.8.3. *Resolution of Discrepancies*. Disagreements regarding any determination of Non-Conformance by FLX shall be resolved in accordance with the provisions of the Clinical Quality Agreement.
- 8.9. <u>Investigations</u>. The process for investigations of any Non-Conformance shall be handled in accordance with the Clinical Quality Agreement.
- 8.10. <u>Shortage; Allocation</u>. In the event that a Party's Compound is in short supply such that a Party reasonably believes in good faith that it will not be able to fulfill its supply obligations hereunder with respect to its Compound, such Party will provide prompt written notice to the other Party thereof (including the shipments of Compound hereunder expected to be impacted and the quantity of its Compound that such Party reasonably determines it will be able to supply) and the Parties will promptly discuss such situation (including how the quantity of Compound that such Party is able to supply hereunder will be allocated within the Study). In such event, the Party experiencing such shortage shall (i) use its commercially reasonable efforts to remedy the situation giving rise to such shortage and to take action to minimize the impact of the shortage on the Study, and (ii) [***].
- 8.11. <u>Records; Audit Rights</u>. FLX shall keep complete and accurate records pertaining to its use and disposition of Merck Compound (including its storage, shipping (cold chain) and chain of custody activities) and, upon request of Merck, [***], shall make such records available during regular business hours to review by Merck for the purpose of conducting investigations for the determination of Merck Compound safety and/or efficacy and FLX's compliance with this Agreement with respect to the Merck Compound.
- 8.12. *Quality*. Quality matters related to the Manufacture of the Compounds shall be governed by the terms of the Clinical Quality Agreement in addition to the relevant quality provisions of this Agreement.
- 8.13. *Quality Control*. Each Party shall implement and perform operating procedures and controls for sampling, stability and other testing of its Compound, and for validation, documentation and release of its Compound and such other quality assurance and quality control procedures as are required by the Specifications, cGMPs and the Clinical Quality Agreement.
- 8.14. <u>Audits and Inspections</u>. The Parties' audit and inspection rights related to this Agreement shall be governed by the terms of the Clinical Quality Agreement.
 - 8.15. *Recalls*. Recalls of the Compounds shall be governed by the terms of the Clinical Quality Agreement.
 - 8.16. <u>VAT</u>.
- 8.16.1. It is understood and agreed between the Parties that any payments made and any other consideration given under this Agreement are each exclusive of any value added or similar tax ("VAT"), which shall be added thereon as applicable and at the relevant rate. Subject to Section 8.16.1, where VAT is properly charged by the supplying Party and added to a payment made or other consideration provided (as applicable) under this Agreement, the Party making the payment or providing the other consideration (as applicable) will pay the amount of VAT properly

chargeable only on receipt of a valid tax invoice from the supplying Party issued in accordance with the laws and regulations of the country in which the VAT is chargeable. Each Party agrees that it shall provide to the other Party any information and copies of any documents within its Control to the extent reasonably requested by the other Party for the purposes of (i) determining the amount of VAT chargeable on any supply made under this Agreement, (ii) establishing the place of supply for VAT purposes, or (iii) complying with its VAT reporting or accounting obligations.

8.16.2. Where one Party or its Affiliate (the "**First Party**") is treated as making supply of goods or services in a particular jurisdiction (for VAT purposes) [***], and the other Party or its Affiliate (the "**Second Party**") is treated as receiving such supply in the same jurisdiction, thus resulting in an amount of VAT being properly chargeable on such supply, the Second Party shall only be obliged to pay to the First Party the amount of VAT properly chargeable on such supply (and no other amount). The Second Party shall pay such VAT to the First Party on receipt of a valid VAT invoice from the First Party (issued in accordance with the laws and regulations of the jurisdiction in which the VAT is properly chargeable). Each Party agrees to (i) use its reasonable efforts to determine and agree the value of the supply that has been made and, as a result, the corresponding amount of VAT that is properly chargeable and (ii) provide to the other Party any information or copies of documents in its Control as are reasonably necessary to evidence that such supply will take, or has taken, place in the same jurisdiction (for VAT purposes).

9. Confidentiality.

- 9.1. <u>Confidential Information</u>. Subject to <u>Section 13.4.8</u>, FLX and Merck agree to hold in confidence any Confidential Information provided by or on behalf of the other Party, and neither Party shall use Confidential Information of the other Party except to fulfill such Party's obligations under this Agreement or exercising its rights. Without limiting the foregoing, the Receiving Party may not, without the prior written permission of the Disclosing Party, disclose any Confidential Information of the Disclosing Party to any Third Party except to the extent disclosure (i) is required by Applicable Law; (ii) is pursuant to the terms of this Agreement; or (iii) is necessary for the conduct of the Study, and in each case ((i) through (iii)) *provided* that the Receiving Party shall provide reasonable advance notice to the Disclosing Party before making such disclosure. For the avoidance of doubt, FLX may, without Merck's consent, disclose Confidential Information to clinical trial sites and clinical trial investigators performing the Study, the data safety monitoring and advisory board relating to the Study, and Regulatory Authorities working with FLX on the Study, in each case to the extent necessary for the performance of the Study and *provided* that such Persons (other than governmental entities) are bound by an obligation of confidentiality at least as stringent as the obligations contained herein.
- 9.2. *Inventions*. Notwithstanding the foregoing: (i) Inventions that constitute Confidential Information and are jointly owned by the Parties, shall constitute the Confidential Information of both Parties and each Party shall have the right to use and disclose such Confidential Information consistent with <u>Articles 10</u>, <u>11</u> and <u>12</u>; and (ii) Inventions that constitute Confidential Information and are solely owned by one Party shall constitute the Confidential Information of that Party and each Party shall have the right to use and disclose such Confidential Information consistent with <u>Articles 10</u>, <u>11</u> and <u>12</u>.

- 9.3. *Personal Identifiable Data*. All Confidential Information containing personal identifiable data shall be handled in accordance with all Applicable Laws relating to data protection and privacy.
- 9.4. <u>Publicity/Use of Names</u>. No disclosure of the existence, or the terms, of this Agreement may be made by either Party, and no Party shall use the name, trademark, trade name or logo of the other Party, its Affiliates or their respective employee(s) in any publicity, promotion, news release or disclosure relating to this Agreement or its subject matter, without the prior express written permission of that other Party, except as may be required by Applicable Law.

10. <u>Intellectual Property</u>.

10.1. Joint Ownership, Prosecution and Enforcement.

10.1.1. <u>Joint Ownership and Prosecution</u>.

- (a) All rights to all Inventions relating to, or covering, the combined use of the FLX Compound and the Merck Compound that are not Merck Inventions or FLX Inventions (each a "Jointly Owned Invention") shall be owned jointly by FLX and Merck. Merck hereby assigns to FLX an undivided one-half interest in, to and under the Jointly Owned Inventions that are invented or created solely by Merck or by Persons having an obligation to assign such rights to Merck. FLX hereby assigns to Merck an undivided one-half interest in, to and under any Jointly Owned Inventions that are invented or created solely by FLX or by Persons having an obligation to assign such rights to FLX. [***].
 - (b) [***].
 - (c) [***].
- (d) Except as expressly provided in <u>Section 10.1.1(c)</u> and in furtherance and not in limitation of <u>Section 9.1</u>, each Party agrees to make no Patent Application based on the other Party's Confidential Information, and to give no assistance to any Third Party for such application, without the other Party's prior written authorization.

10.1.2. Patent Enforcement

- (a) Each Party shall promptly notify the other in writing of any actual or threatened infringement or misappropriation by a Third Party of any Joint Patent or Jointly Owned Invention of which such Party becomes aware ("Third Party Infringement").
- (b) [***] shall have the first right to initiate legal action to [***]. In the event that [***] fails to initiate or defend such action by the earlier of (i) [***] after first being notified or made aware of such Third Party Infringement and (ii) [***] before the expiration for initiating or defending such action, [***] shall have the right to initiate or defend such action at its sole expense.
- (c) [***] shall have the first right to initiate legal action to enforce all Joint Patents and Jointly Owned Inventions against Third Party Infringement, where such Third Party Infringement [***] or to defend any declaratory judgment action relating thereto, at its sole expense. In the event that [***] fails to initiate or defend such action by the earlier of (i) [***] after first being notified or made aware of such Third Party Infringement and (ii) [***] before the expiration for initiating or defending such action, [***] shall have the right to do so at its sole expense.

- (d) The Parties shall cooperate in good faith to jointly control legal action to enforce all [***] against any Third Party Infringement where such Third Party Infringement [***] or to defend any declaratory judgment action relating thereto, and [***]. Notwithstanding the foregoing, either Party shall have the right to opt-out of controlling such legal action by providing written notice to the other Party by the earliest of (1) [***] after first being noticed of such Third Party Infringement, (2) [***] before the expiration date for filing such action, (3) [***] before the expiration date for filing an answer to a complaint in a declaratory judgment action, and (4) [***] after receipt of an application to the FDA under Section 351(k) of the U.S. Public Health Services Act (42 U.S.C. 262(k)), or to a similar agency under any similar provisions in another country, seeking approval of a biosimilar or interchangeable biological product of the Merck Compound, whichever comes first.
- (e) If one Party (the "Enforcing Party") brings any prosecution or enforcement action or proceeding against a Third Party with respect to any [***], the second Party (the "Non-Enforcing Party") agrees to be joined as a party plaintiff where necessary and to give the Enforcing Party reasonable assistance and authority to file and prosecute the suit, at the Enforcing Party's cost and expense. The costs and expenses of the Enforcing Party under this Section 10.1.2 shall be borne by such Enforcing Party, and any damages or other monetary awards recovered shall be shared as follows: [***]. A settlement or consent judgment or other voluntary final disposition of a suit under this Section 10.1.2 may not be entered into without the consent of the Party not bringing the suit.
- 10.2. <u>Inventions Owned by FLX</u>. Notwithstanding anything to the contrary contained in <u>Section 10.1</u>, the Parties agree that all rights to Inventions relating solely to, or covering solely, the FLX Compound or a FLX Class Compound, and any improvements related thereto, regardless of whether such Invention or improvement was invented solely by FLX or Merck or jointly by the Parties, are the exclusive property of FLX ("FLX Inventions"). FLX shall (a) be entitled to file and prosecute in its own name Patent Applications in respect of FLX Inventions and (b) own Patents that issue from any such Patent Applications in respect of FLX Inventions. For the avoidance of doubt, any Invention [***] is an FLX Invention. Merck hereby assigns its right, title and interest to any and all FLX Inventions to FLX.
- 10.3. <u>Inventions Owned by Merck</u>. Notwithstanding anything to the contrary contained in <u>Section 10.1</u>, the Parties agree that all rights to Inventions relating solely to, or covering solely, the Merck Compound or a PD-1 Antagonist, and any improvements related thereto, regardless of whether such Invention or improvement was invented solely by Merck or FLX or jointly by the Parties, are the exclusive property of Merck ("**Merck Inventions**"). Merck shall (a) be entitled to file and prosecute in its own name Patent Applications in respect of Merck Inventions and (b) own Patents that issue from any such Patent Applications in respect of Merck Inventions. For the avoidance of doubt, any Invention [***] is a Merck Invention. FLX hereby assigns its right, title and interest to any and all Merck Inventions to Merck.

10.4. <u>Mutual Freedom to Operate for Combination Inventions</u>.

- 10.4.1. *FLX License to Merck*. FLX hereby grants to Merck a non-exclusive, worldwide, royalty-free, fully paid-up, transferable and sublicensable license to any patent Controlled by FLX that (a) [***] (the "FLX Background Patents") solely for the purposes of: [***].
- 10.4.2. *Merck License to FLX*. Merck hereby grants to FLX a non-exclusive, worldwide, royalty-free, fully paid-up, transferable and sublicensable license to any patent Controlled by Merck that (a) [***] (the "**Merck Background Patents**") solely for the purposes of: [***].
- 10.4.3. *No Other Rights.* For clarity, the terms of this <u>Section 10.4</u> do not provide Merck or FLX with any rights, title or interest or any license to the other Party's intellectual property rights which [***].

- 10.4.4. *Termination*. Any and all licenses granted under this <u>Section 10.4</u> shall terminate upon the expiration or earlier termination of this Agreement and shall not survive such expiration or termination; *provided*, *however* [***].
- 10.5. *Ownership of Other Inventions*. Ownership of all Inventions other than Jointly Owned Inventions, Merck Inventions and FLX Inventions shall be based on inventorship as determined under United States patent law.

11. Reprints; Rights of Cross-Reference.

Consistent with applicable copyright and other laws, each Party may use, refer to, and disseminate reprints of scientific, medical and other published articles and materials from journals, conferences and/or symposia relating to the Study that disclose the name of a Party, *provided*, *however*, that such use does not constitute an endorsement of any commercial product or service by the other Party.

12. Publications; Press Releases.

- 12.1. *Clinical Trial Registry*. FLX shall register the Study with the Clinical Trials Registry located at www.clinicaltrials.gov and is committed to timely publication of the results following Study Completion, after taking appropriate action to secure intellectual property rights (if any) arising from the Study. The publication of the results of the Study will be in accordance with the Protocol.
- 12.2. <u>Publication</u>. Each Party shall use reasonable efforts to publish or present scientific papers dealing with the Study in accordance with accepted scientific practice. The Parties agree that prior to submission of the results of the Study for publication or presentation or any other dissemination of such results including oral dissemination, the publishing Party shall invite the other to comment on the content of the material to be published, presented, or otherwise disseminated according to the following procedure:
- 12.2.1. [***], the publishing Party shall provide to the other Party the full details of the proposed publication, presentation, or dissemination in an electronic version (cd-rom or email attachment). Upon written request from the other Party, the publishing Party agrees not to submit data for publication/presentation/dissemination for an additional [***] in order to allow for actions to be taken to preserve rights for patent protection.
- 12.2.2. The publishing Party shall give reasonable consideration to any request by the other Party made within the periods mentioned in Section 12.2.1 to modify the publication and the Parties shall work in good faith and in a timely manner to resolve any issue regarding the content for publication.
 - 12.2.3. The publishing Party shall remove all Confidential Information of the other Party before finalizing the publication.
- 12.3. <u>Press Releases</u>. Promptly following the Effective Date, FLX may issue the press release attached hereto as <u>Appendix C</u>. Unless otherwise required by Applicable Law, neither Party shall make any public announcement concerning this Agreement without the prior written consent of the other Party. To the extent a Party desires to make such public announcement, such Party shall provide the other Party with a draft thereof at least [***] prior to the date on which such Party would like to make the public announcement.

13. Representations and Warranties; Disclaimers.

13.1. <u>Due Authorization</u>. Each of FLX and Merck represents and warrants to the other that: (a) it has the corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder; (b) it has taken all necessary corporate action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder; and (c) this Agreement has been duly executed and delivered on behalf of such Party and constitutes a legal, valid and binding obligation of such Party that is enforceable against it in accordance with its terms.

13.2. Compounds.

- 13.2.1. *FLX Compound*. FLX hereby represents and warrants to Merck that: (a) FLX has the full right, power and authority to grant all of the licenses granted to Merck under this Agreement; and (b) FLX Controls the FLX Compound.
- 13.2.2. *Merck Compound*. Merck hereby represents and warrants to FLX that: (a) Merck has the full right, power and authority to grant all of the licenses granted to FLX under this Agreement; and (b) Merck Controls the Merck Compound.
- 13.3. *Results*. FLX does not undertake that the Study shall lead to any particular result, nor is the success of the Study guaranteed. Neither Party shall be liable for any use that the other Party may make of the Clinical Data, or Sample Testing Results that are shared between the Parties in accordance with the Data Sharing and Sample Testing Schedule, nor for advice or information given in connection therewith.

13.4. Anti-Corruption.

- 13.4.1. In performing their respective obligations hereunder, the Parties acknowledge that the corporate policies of FLX and Merck and their respective Affiliates require that each Party's business be conducted within the letter and spirit of the law. By signing this Agreement, each Party agrees to conduct the business contemplated herein in a manner that is consistent with all Applicable Law, including the Stark Act, Anti-Kickback Statute, Sunshine Act, and the U.S. Foreign Corrupt Practices Act, good business ethics, and its ethics and other corporate policies and agrees to abide by the spirit of the other Party's guidelines, which may be provided by such other Party from time to time.
- 13.4.2. Specifically, each Party represents and warrants that it has not, and covenants that it, its Affiliates, and its Affiliates' directors, employees, officers, and anyone acting on its behalf, will not, in connection with the performance of this Agreement, directly or indirectly, make, promise, authorize, ratify or offer to make, or take any action in furtherance of, any payment or transfer of anything of value for the purpose of influencing, inducing or rewarding any act, omission or decision to secure an improper advantage; or improperly assisting it in obtaining or retaining business for it or the other Party, or in any way with the purpose or effect of public or commercial bribery.

- 13.4.3. Neither Party shall contact, or otherwise knowingly meet with, any Government Official for the purpose of discussing activities arising out of or in connection with this Agreement, without the prior written approval of the other Party, except where such meeting is consistent with the purpose and terms of this Agreement and in compliance with Applicable Law.
- 13.4.4. Each Party represents and warrants that it (a) is not excluded, debarred, suspended, proposed for suspension or debarment, in Violation or otherwise ineligible for government programs; and (b) has not employed or subcontracted with any Person for the performance of the Study who is excluded, debarred, suspended, proposed for suspension or debarment, or is in Violation or otherwise ineligible for government programs.
- 13.4.5. Each Party represents and warrants that, except as disclosed to the other in writing prior to the Effective Date, such Party: (a) does not have any interest that directly or indirectly conflicts with its proper and ethical performance of this Agreement; (b) shall maintain arm's length relations with all Third Parties with which it deals for or on behalf of the other in performance of this Agreement; and (c) has provided complete and accurate information and documentation to the other Party, the other Party's Affiliates and its and their personnel in the course of any due diligence conducted by the other Party for this Agreement, including disclosure of any officers, employees, owners or Persons directly or indirectly retained by such Party in relation to the performance of this Agreement who are Government Officials or relatives of Government Officials. Each Party shall make all further disclosures to the other Party as are necessary to ensure the information provided remains complete and accurate throughout the Term. Subject to the foregoing, each Party agrees that it shall not hire or retain any Government Official to assist in its performance of this Agreement, with the sole exception of conduct of or participation in clinical trials under this Agreement, *provided* that such hiring or retention shall be subject to the completion by the hiring or retaining Party of a satisfactory anti-corruption and bribery (e.g., FCPA) due diligence review of such Government Official. Each Party further covenants that any future information and documentation submitted to the other Party as part of further due diligence or a certification shall be complete and accurate.
- 13.4.6. Each Party shall have the right during the Term, and for a period of [***], to conduct an investigation and audit of the other Party's activities, books and records, to the extent they relate to that other Party's performance under this Agreement, to verify compliance with the terms of this Section 13.4. Such other Party shall cooperate fully with such investigation or audit, the scope, method, nature and duration of which shall be at the sole reasonable discretion of the Party requesting such audit. [***]. The auditing Party shall provide the other Party with [***] advance notice prior to such audit.
- 13.4.7. Each Party shall use commercially reasonable efforts to ensure that all transactions under the Agreement are properly and accurately recorded in all material respects on its books and records and that each document upon which entries in such books and records are based is complete and accurate in all material respects. Each Party further represents, warrants and covenants that all books, records, invoices and other documents relating to payments and

expenses under this Agreement are and shall be complete and accurate and reflect in reasonable detail the character and amount of transactions and expenditures. Each Party shall maintain a system of internal accounting controls reasonably designed to ensure that no off-the-books or similar funds or accounts will be maintained or used in connection with this Agreement.

- 13.4.8. Each Party agrees that in the event that the other Party believes in good faith that there has been a possible violation of any provision of Section 13.4, such other Party may make full disclosure of such belief and related information needed to support such belief at any time and for any reason to any competent government bodies and agencies, and to anyone else such Party determines in good faith has a legitimate need to know.
- 13.4.9. Each Party shall comply with its own ethical business practices policy and any corporate integrity agreement (if applicable) to which it is subject, and shall conduct its Study-related activities in accordance with Applicable Law. Each Party shall ensure that all of its employees involved in performing its obligations under this Agreement are made specifically aware of the compliance requirements under this Section 13.4. In addition, each Party shall ensure that all such employees participate in and complete mandatory compliance training to be conducted by each Party, including specific training on anti-bribery and corruption, prior to his/her performance of any obligations or activities under this Agreement. Each Party shall certify its continuing compliance with the requirements under this Section 13.4 on a periodic basis during the Term in such form as may be reasonably specified by the other Party.
- 13.4.10. Each Party shall have the right to terminate this Agreement immediately upon violation of this <u>Section 13.4</u> in accordance with <u>Section 6.6</u>.
- 13.5. <u>DISCLAIMER</u>. EXCEPT AS EXPRESSLY PROVIDED HEREIN, MERCK MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE MERCK COMPOUND, AND FLX MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE FLX COMPOUND.
- 14. <u>Insurance; Indemnification; Limitation of Liability.</u>
- 14.1. *Insurance*. Each Party warrants that it maintains a policy or program of insurance or self-insurance at levels sufficient to support the indemnification obligations assumed herein. Upon request, a Party shall provide evidence of such insurance.
 - 14.2. Indemnification.
- 14.2.1. *Indemnification by FLX*. FLX agrees to defend, indemnify and hold harmless Merck, its Affiliates, and its and their employees, directors, subcontractors and agents from and against any loss, damage, reasonable costs and expenses (including reasonable attorneys' fees and expenses) incurred in connection with any claim, proceeding, or investigation by a Third Party arising out of this Agreement or the Study (a "**Liability**"), [***] the extent that such Liability was directly caused by [***].

- 14.2.2. *Indemnification by Merck*. Merck agrees to defend, indemnify and hold harmless FLX, its Affiliates, and its and their employees, directors, Subcontractors and agents from and against any Liability to the extent such Liability was directly caused by [***].
- 14.2.3. Procedure. The obligations of Merck and FLX under this Section 14.2 are conditioned upon the delivery of written notice to Merck or FLX, as the case might be, of any potential Liability within a reasonable time after a Party becomes aware of such potential Liability. The indemnifying Party will have the right to assume the defense of any suit or claim related to the Liability (using counsel reasonably satisfactory to the indemnified Party) if it has assumed responsibility for the suit or claim in writing; provided that the indemnified Party may assume the responsibility for such defense to the extent the indemnifying Party does not do so in a timely manner). The indemnified Party may participate in (but not control) the defense thereof at its sole cost and expense. The Party controlling such defense (the "Defending Party") shall keep the other Party (the "Other Party") advised of the status of such action, suit, proceeding or claim and the defense thereof and shall consider recommendations made by the Other Party with respect thereto. The Defending Party shall not agree to any settlement of such action, suit, proceeding or claim or consent to any judgment in respect thereof that does not include a complete and unconditional release of the Other Party from all liability with respect thereto or that imposes any liability or obligation on the Other Party without the prior written consent of the Other Party.
- 14.2.4. *Study Subjects*. FLX shall not offer compensation on behalf of Merck to any Study subject or bind Merck to any indemnification obligations in favor of any Study subject. Merck shall not offer compensation on behalf of FLX to any Study subject or bind FLX to any indemnification obligations in favor of any Study subject.
- 14.3. <u>LIMITATION OF LIABILITY</u>. IN NO EVENT SHALL EITHER PARTY (OR ANY OF ITS AFFILIATES OR SUBCONTRACTORS) BE LIABLE TO THE OTHER PARTY UNDER ANY THEORY FOR, NOR SHALL ANY INDEMNIFIED PARTY HAVE THE RIGHT TO RECOVER, ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR OTHER SIMILAR DAMAGES OR ANY PUNITIVE DAMAGES OR ANY LOST PROFIT, LOST SALE OR LOST OPPORTUNITY DAMAGES (WHETHER SUCH CLAIMED DAMAGES ARE DIRECT OR INDIRECT), WHETHER ARISING DIRECTLY OR INDIRECTLY OUT OF (A) THE MANUFACTURE OR USE OF ANY COMPOUND SUPPLIED HEREUNDER OR (B) ANY BREACH OF OR FAILURE TO PERFORM ANY OF THE PROVISIONS OF THIS AGREEMENT OR ANY REPRESENTATION, WARRANTY OR COVENANT CONTAINED IN OR MADE PURSUANT TO THIS AGREEMENT, EXCEPT THAT SUCH LIMITATION SHALL NOT APPLY TO DAMAGES PAID OR PAYABLE TO A THIRD PARTY BY AN INDEMNIFIED PARTY FOR WHICH THE INDEMNIFIED PARTY IS ENTITLED TO INDEMNIFICATION HEREUNDER OR WITH RESPECT TO DAMAGES ARISING OUT OF OR RELATED TO A PARTY'S BREACH OF ITS OBLIGATIONS UNDER THIS AGREEMENT WITH RESPECT TO USE, DISCLOSURE, LICENSE, ASSIGNMENT OR OTHER TRANSFER OF [***].

15. Use of Name.

Except as otherwise provided herein, neither Party shall have any right, express or implied, to use in any manner the name or other designation of the other Party or any other trade name, trademark or logo of the other Party for any purpose in connection with the performance of this Agreement without the other Party's prior written consent.

16. Force Majeure.

If, in the performance of this Agreement, one of the Parties is prevented, hindered or delayed by reason of any cause beyond such Party's reasonable control (e.g., war, riots, fire, strike, acts of terror, governmental laws), such Party shall be excused from performance to the extent that it is necessarily prevented, hindered or delayed ("Force Majeure"). The non-performing Party shall notify the other Party of such Force Majeure within [***] days after such occurrence by giving written notice to the other Party stating the nature of the event, its anticipated duration, and any action being taken to avoid or minimize its effect. The suspension of performance will be of no greater scope and no longer duration than is necessary and the non-performing Party shall use commercially reasonable efforts to remedy its inability to perform.

17. Entire Agreement; Amendment; Waiver.

This Agreement, together with the Appendices and Schedules hereto and the Related Agreements, constitutes the sole, full and complete agreement by and between the Parties with respect to the subject matter of this Agreement, and all prior agreements, understandings, promises and representations, whether written or oral, with respect thereto are superseded by this Agreement. In the event of a conflict between a Related Agreement and this Agreement, the terms of this Agreement shall control. No amendments, changes, additions, deletions or modifications to or of this Agreement shall be valid unless reduced to writing and signed by the Parties hereto. Any term or condition of this Agreement may be waived at any time by the Party that is entitled to the benefit thereof, but no such waiver shall be effective unless set forth in a written instrument duly executed by or on behalf of the Party waiving such term or condition. The waiver by either Party of any right hereunder or of the failure to perform or of a breach by the other Party shall not be deemed a waiver of any other right hereunder or of any other breach or failure by said other Party whether of a similar nature or otherwise.

18. Assignment and Affiliates.

Neither Party shall assign or transfer this Agreement without the prior written consent of the other Party; *provided*, *however*, that either Party may assign all or any part of this Agreement to: (i) one or more of its Affiliates; [***] without the other Party's consent, and any and all rights and obligations of either Party may be exercised or performed by its Affiliates, *provided* that any such Affiliate [***] agrees agree to be bound by this Agreement, and provided further that [***]. Any assignment not in conformance with this <u>Article 18</u> shall be null and void.

19. Invalid Provision.

If any provision of this Agreement is held to be illegal, invalid or unenforceable, the remaining provisions shall remain in full force and effect and will not be affected by the illegal, invalid or unenforceable provision. In lieu of the illegal, invalid or unenforceable provision, the Parties shall negotiate in good faith to agree upon a reasonable provision that is legal, valid and enforceable to carry out as nearly as practicable the original intention of the entire Agreement.

20. No Additional Obligations.

FLX and Merck have no obligation to renew this Agreement or apply this Agreement to any clinical trial other than the Study. Nothing in this Agreement obligates the Parties to enter into any other agreement (other than the Related Agreements) at this time or in the future.

21. Governing Law; Dispute Resolution.

- 21.1. The Parties shall attempt in good faith to settle all disputes arising out of or in connection with this Agreement in an amicable manner. Any claim, dispute or controversy arising out of or relating to this Agreement, including the breach, termination or validity hereof or thereof, shall be governed by and construed in accordance with the substantive laws of the State of New York, without giving effect to its choice of law principles.
- 21.2. Nothing contained in this Agreement shall deny either Party's right to seek injunctive or other equitable relief from a court of competent jurisdiction in the context of a bona fide emergency or prospective irreparable harm, and such an action may be filed or maintained notwithstanding any ongoing discussions between the Parties.

22. Notices.

All notices or other communications that are required or permitted hereunder shall be in writing and delivered personally, sent by facsimile (and promptly confirmed by personal delivery or overnight courier), or sent by internationally-recognized overnight courier addressed as follows:

If to FLX, to:

FLX Bio, Inc. 561 Eccles Ave. South San Francisco, CA 94080 Attention: Chief Operating Officer

With copy (which shall not constitute notice) to:

Cooley Godward Kronish LLP 3175 Hanover St. Palo Alto, CA 94034-1130

If to Merck, to:

MSD International GmbH Weystrasse 20 6000 Luzern 6 Switzerland Attention: Director

Facsimile: +41 44 828 7208

With copies (which shall not constitute notice) to:

[***]

[***]

23. Relationship of the Parties.

[***]

The relationship between the Parties is and shall be that of independent contractors, and does not and shall not constitute a partnership, joint venture, agency or fiduciary relationship. Neither Party shall have the authority to make any statements, representations or commitments of any kind, or take any actions, that are binding on the other Party, except with the prior written consent of the other Party to do so. All Persons employed by a Party will be the employees of such Party and not of the other Party and all costs and obligations incurred by reason of any such employment shall be for the account and expense of such Party.

24. Counterparts and Due Execution.

This Agreement and any amendment may be executed in any number of counterparts (including by way of facsimile or electronic transmission), each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, notwithstanding any electronic transmission, storage and printing of copies of this Agreement from computers or printers. When executed by the Parties, this Agreement shall constitute an original instrument, notwithstanding any electronic transmission, storage and printing of copies of this Agreement from computers or printers. For clarity, facsimile signatures and signatures transmitted via PDF shall be treated as original signatures.

25. Construction.

Except where the context otherwise requires, wherever used, the singular will include the plural, the plural the singular, the use of any gender will be applicable to all genders, and the word "or" is used in the inclusive sense (and/or). Whenever this Agreement refers to a number of days, unless otherwise specified, such number refers to calendar days. The captions of this Agreement are for convenience of reference only and in no way define, describe, extend or limit the scope or intent of this Agreement or the intent of any provision contained in this Agreement. The term "including" as used herein shall be deemed to be followed by the phrase "without limitation" or like expression. The term "will" as used herein means shall. The terms "hereof", "hereto", "hereto", "herein" and "hereunder" and words of similar import when used in this Agreement refer to this Agreement as a whole and no to any particular provision of this Agreement. References to "Article," "Section", "Appendix" or "Schedule" are references to the numbered sections of this Agreement and the appendices attached to this Agreement, unless expressly stated otherwise. Except where the context otherwise requires, references to this "Agreement" shall include the appendices attached to this Agreement. The language of this Agreement shall be deemed to be the language mutually chosen by the Parties and no rule of strict construction will be applied against either Party hereto.

[Remainder of page intentionally left blank.]

FLX Bio, Inc.

By: _/s/ Brian R. Wong

Brian R. Wong

Name
Chief Executive Officer
Title

MSD International GmbH

By: _/s/ Franz Escherich

Franz Escherich

Name
Director
Title

IN WITNESS WHEREOF, the respective representatives of the Parties have executed this Agreement as of the Effective Date.

Appendix A

PROTOCOL

[***]

Appendix B

SUPPLY OF COMPOUND

Schedule of Deliveries for FLX475

	Qu	Quantity of Tablets	
Delivery Date	[***] [***] [***	(***)
[***]	[***]	<u> </u>	*]
[***]	– [***] —	- [***]
[***]	– [***] —	- [***]
Total	[***] [***] [***	*] [***]

Schedule of Deliveries for Pembrolizumab 1,2

Delivery Date	Quantity [***] [***])
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
Total	[***]

Notes:

- Pembrolizumab delivery dates and quantities are estimated. Dates and quantities may change based on Study requirements and agreement between the Parties. Total estimated quantities may [***]. [***].

Appendix C

FLX PRESS RELEASE

FLX BIO ANNOUNCES CLINICAL TRIAL COLLABORATION AGREEMENT WITH MERCK FOR ONGOING PHASE 1/2 STUDY OF FLX475

Trial will evaluate FLX Bio's CCR4 inhibitor, FLX475, in combination with Merck's KEYTRUDA® (pembrolizumab), an anti-PD-1 therapy, in multiple types of cancer

SOUTH SAN FRANCISCO, Calif. – November XX, 2018 – FLX Bio, Inc., a clinical-stage, biopharmaceutical company focused on the development of oral small-molecule drugs that target drivers of cancer and other immune-related disorders, today announced that it has established a clinical trial collaboration agreement with Merck (known as MSD outside the U.S. and Canada) to conduct a Phase 1/2 study evaluating the safety and efficacy of the combination of KEYTRUDA® (pembrolizumab), Merck's anti-PD-1 therapy , and FLX Bio's investigational oral small molecule CCR4 inhibitor, FLX475, in patients with multiple types of cancer.

The open-label, dose-escalation and cohort expansion Phase 1/2 study is enrolling patients with multiple types of cancer at leading cancer centers across the United States, Australia and Asia. In addition to evaluating the safety and tolerability of FLX475 as a monotherapy and in combination with pembrolizumab, the study will evaluate changes in the tumor microenvironment and the antitumor activity of both monotherapy and combination therapy. For more information please visit clinicaltrials.gov identifier NCT03674567.

"We are extremely pleased to collaborate with Merck, an established leader in the field of cancer immunotherapy," said Brian Wong, M.D., Ph.D., CEO of FLX Bio. "KEYTRUDA is an anti-PD1 immunotherapy that has demonstrated efficacy in a range of cancers. FLX475 targets a novel mechanism to selectively inhibit the recruitment of regulatory T cells (T_{reg}) into the tumor, where T_{reg} potentially suppress the anti-tumor immune response; thus FLX475 has the potential to deepen and broaden the efficacy of KEYTRUDA when combined. We are excited to collaborate with the Merck team to evaluate the efficacy of a combination of FLX475 and KEYTRUDA which we believe could substantially improve patient outcomes."

Keytruda® is a registered trademark of Merck Sharp & Dohme Corp, a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA.

About FLX475

FLX475 is a best-in-class oral, small molecule antagonist of CCR4 which selectively blocks suppressive regulatory T cells in tumor tissue and promotes a durable anti-tumor immune response. FLX Bio has completed a study of FLX475 in healthy volunteers, demonstrating that the compound is safe with excellent pharmacokinetic and pharmacodynamic properties. In preclinical studies, FLX475 inhibited tumor growth and increased tumor regression as a single agent. In addition, FLX475 enhanced the anti-tumor effects of various checkpoint inhibitors as well as immune agonist antibodies. FLX475 also has the potential to enhance cell-based immunotherapies such as CAR-T and cancer vaccines. In contrast to depleting antibody approaches, FLX475 selectively blocks the recruitment of regulatory T cells to the tumor site and does not deplete cells beneficial to an anti-tumor response or regulatory T cells in healthy tissue.

About FLX Bio

FLX Bio, Inc. is a privately-held biopharmaceutical company focused on the discovery, development and commercialization of best-in-class, oral small molecule therapeutics for the treatment of cancers and other immune disorders. Our lead compounds inhibit the CCR4 pathway which plays a key role in both suppressing the immune response to cancer and in the initiation, progression and persistence of allergic inflammation. We leverage big data and proprietary informatics together with our advanced drug discovery capabilities and deep biology expertise, to develop therapeutics that address key pressure points in pathways that propagate an abnormal immune response.

Located in South San Francisco, Calif., and funded by leading investors, including The Column Group (TCG), Kleiner Perkins (KP), Topspin Partners, GV (formerly Google Ventures) and Celgene Corporation, FLX Bio has assembled a leadership team and advisory group with a proven track record of success and team of scientists with substantial knowledge and expertise in drug discovery and translational areas essential to execute on this approach. For more information, please visit www.flxbio.com.

Contact: Angela Bitting For FLX Bio, Inc. media@flxbio.com (925) 202-6211 [***]

RAPT THERAPEUTICS, INC.

NON-EMPLOYEE DIRECTOR COMPENSATION POLICY

JUNE 27, 2019

Each member of the Board of Directors (the "Board") of RAPT Therapeutics, Inc. (the "Company") who is a non-employee director of the Company (each such member, a "Non-Employee Director") will receive the compensation described in this Non-Employee Director Compensation Policy (the "Director Compensation Policy") for his or her Board service following the closing of the initial public offering of the Company's common stock (the "IPO").

The Director Compensation Policy will be effective upon the execution of the underwriting agreement in connection with the IPO (the date of such execution being referred to as the "IPO Date"). The Director Compensation Policy may be amended at any time in the sole discretion of the Board or the Compensation Committee of the Board.

A Non-Employee Director may decline all or any portion of his or her compensation by giving notice to the Company prior to the date cash is to be paid or equity awards are to be granted, as the case may be.

ANNUAL CASH COMPENSATION

Commencing at the beginning of the first calendar quarter following the IPO Date, each Non-Employee Director will receive the cash compensation set forth below for service on the Board. The annual cash compensation amounts will be payable in equal quarterly installments, in arrears no later than 30 days following the end of each quarter in which the service occurred, prorated for any partial quarter of service. All annual cash fees are vested upon payment.

1. Annual Board Service Retainer:

- (a) All Eligible Directors: \$35,000
- (b) Chair of the Board (as applicable): \$30,000 (in addition to above)

2. Annual Committee Member Service Retainer:

- (a) Member of the Audit Committee: \$12,500
- (b) Member of the Compensation Committee: \$5,000
- (c) Member of the Nominating and Corporate Governance Committee: \$4,000

3. Annual Committee Chair Service Retainer (in lieu of Committee Member Service Retainer):

- (a) Chair of the Audit Committee: \$25,000
- (b) Chair of the Compensation Committee: \$10,000
- (c) Chair of the Nominating and Corporate Governance Committee: \$8,000

EQUITY COMPENSATION

Equity awards will be granted under the Company's 2019 Equity Incentive Plan, as amended from time to time, or any successor equity incentive plan (the "*Plan*"). All stock options granted under the Director Compensation Policy will be Nonstatutory Stock Options (as defined in the Plan), with a term of ten years from the date of grant (subject to earlier termination upon a termination of the Non-Employee Director's Continuous Service (as defined in the Plan)) and an exercise price per share equal to 100% of the Fair Market Value (as defined in the Plan) of a share of the Company's common stock on the date of grant.

1. Automatic Equity Grants.

- (a) Initial Grant for New Directors. Without any further action of the Board, each person who, after the IPO Date, is elected or appointed for the first time to be a Non-Employee Director will automatically, upon the date of his or her initial election or appointment to be a Non-Employee Director, be granted a Nonstatutory Stock Option to purchase 22,500 shares of common stock (the "Initial Grant"). Each Initial Grant will vest in a series of three successive equal annual installments over the three-year period measured from the date of grant, subject to the Non-Employee Director's Continuous Service through each applicable vesting date.
- **(b) Annual Grant.** Without any further action of the Board, at the close of business on the date of each annual meeting of the Company's stockholders (each, an "**Annual Meeting**") following the IPO, each person who is then a Non-Employee Director will automatically be granted a Nonstatutory Stock Option to purchase 7,500 shares of Company common stock (the "**Annual Grant**"). Each Annual Grant will vest upon the earlier of the one (1) year anniversary of the grant date or the day prior to the Company's next Annual Meeting occurring after the grant date, subject to the Non-Employee Director's Continuous Service through the vesting date.
- 2. Change in Control. Notwithstanding the foregoing vesting schedules, for each Non-Employee Director who remains in Continuous Service with the Company until immediately prior to the closing of a Change in Control (as defined in the Plan), the shares subject to his or her then-outstanding equity awards that were granted pursuant to the Director Compensation Policy will become fully vested immediately prior to the closing of such Change in Control.
- **3. Remaining Terms.** The remaining terms and conditions of each stock option, including transferability, will be as set forth in the Company's standard Option Agreement, in the form adopted from time to time by the Board.

EXPENSES

The Company will reimburse Non-Employee Directors for ordinary, necessary and reasonable out-of-pocket travel expenses to cover in-person attendance at and participation in Board and committee meetings; *provided*, that the Non-Employee Director timely submits to the Company appropriate documentation substantiating such expenses in accordance with the Company's travel and expense policy, as in effect from time to time.

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" and to the use of our report dated May 24, 2019 (except for the retroactive effect of the 1-for-6 reverse stock split as described in Note 2, as to which the date is July 22, 2019) in Amendment No. 1 to the Registration Statement on Form S-1 (No. 333-232572) and related Prospectus of RAPT Therapeutics, Inc. for the registration of shares of its common stock.

/s/ Ernst & Young LLP

Redwood City, California July 22, 2019