Filed Pursuant to Rule 424(b)(5)
Registration Statement No. 333-234537

Calculation of Registration Fee

Title of each class of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per unit(2)	Proposed maximum aggregate offering price(2)	Amount of registration fee
4.00% Convertible Senior Notes due 2026	$138,000,000(1)(2)	100% of principal amount	$138,000,000(2)	$17,913(3)
Common stock, $0.001 par value per share	(4)	— (4)	— (4)	— (5)

(1) Represents the aggregate principal amount of 4.00% Convertible Senior Notes due 2026 (the "notes") whose offer and sale are registered hereby.
(2) Includes $18,000,000 aggregate principal amount of the notes that may be offered and sold pursuant to the exercise in full of the underwriters' over-allotment option to purchase additional notes, solely to cover over-allotments.
(3) Calculated pursuant to Rule 457(o) and Rule 457(r) under the Securities Act of 1933, as amended (the "Securities Act"). The fee payable in connection with the offering pursuant to this prospectus supplement has been paid in accordance with Rule 456(b) under the Securities Act.
(4) Includes an indeterminate number of shares of common stock of Cytokinetics, Incorporated issuable upon conversion of the notes. The initial maximum conversion rate of the notes is 120.8459 shares of common stock per $1,000 principal amount of the notes. Pursuant to Rule 416 under the Securities Act, the amount of shares of common stock whose offer and sale is registered hereby includes an indeterminate number of shares of common stock that may be issued in connection with stock splits, stock dividends, or similar transactions. No additional consideration is to be received in connection with the exercise of the conversion privilege of the notes.
(5) Pursuant to Rule 457(i) under the Securities Act, no separate registration fee is required for the shares of common stock issuable upon conversion of the notes because no additional consideration is to be received in connection with the exercise of the conversion privilege of the notes.

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PROSPECTUS SUPPLEMENT TO PROSPECTUS DATED NOVEMBER 6, 2019

$120,000,000

4.00% Convertible Senior Notes due 2026
Offering Price 100%

We are offering $120,000,000 aggregate principal amount of our 4.00% convertible senior notes due 2026, or the notes. In addition, we have granted the underwriters an option, exercisable for a period of 30 days from the date of this prospectus supplement, to purchase up to an additional $18,000,000 aggregate principal amount of notes, solely to cover over-allotments. The notes will mature on November 15, 2026, unless earlier repurchased, redeemed or converted.

We will pay interest on the notes at an annual rate of 4.00%, payable semi-annually in arrears on May 15 and November 15 of each year, beginning on May 15, 2020.

Noteholders may convert their notes at their option only in the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on March 31, 2020 (and only during such calendar quarter), if the last reported sale price per share of our common stock for each of at least 20 trading days, whether or not consecutive, during the period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter exceeds 130% of the conversion price on the applicable trading day; (2) during the five consecutive business days immediately after any 10 consecutive trading day period (such 10 consecutive trading day period, the "measurement period") if the trading price (as defined in this prospectus supplement) per $1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price per share of our common stock on such trading day and the conversion rate on such trading day; (3) upon the occurrence of certain corporate events or distributions on our common stock, as described in this prospectus supplement; (4) if we call the notes for redemption; and (5) at any time from, and including, July 15, 2026 until the close of business on the scheduled trading day immediately before the maturity date. We will settle conversions by paying or delivering, as applicable, cash, shares of our common stock or a combination of cash and shares of our common stock, at our election, based on the applicable conversion rate(s). The initial conversion rate is 94.7811 shares per $1,000 principal amount of notes, which represents an initial conversion price of approximately $10.55 per share, and is subject to adjustment as described in this prospectus supplement. If a "make-whole fundamental change" (as defined in this prospectus supplement) occurs, then we will in certain circumstances increase the conversion rate for a specified period of time.

The notes will be redeemable, in whole or in part, at our option at any time, and from time to time, on or after November 20, 2023 and, in the case of any partial redemption, on or before the 60th scheduled trading day before the maturity date, at a cash redemption price equal to the principal amount of the notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date but only if the last reported sale price per share of our common stock exceeds 130% of the conversion price on (1) each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date we send the related redemption notice; and (2) the trading day immediately before the date we send such notice. In addition, calling any note for redemption will constitute a make-whole fundamental change with respect to that note, in which case the conversion rate applicable to the conversion of that note will be increased in certain circumstances if it is converted after it is called for redemption.

If a "fundamental change" (as defined in this prospectus supplement) occurs, then, except as described in this prospectus supplement, noteholders may require us to repurchase their notes at a cash repurchase price equal to the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date.

The notes will be our general unsecured obligations and will: rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to the notes; rank equal in right of payment with all of our indebtedness that is not so subordinated; effectively rank junior to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and rank structurally junior to all indebtedness and other liabilities of our subsidiaries (including trade payables, but excluding intercompany obligations and liabilities of a type not required to be reflected on a balance sheet of such subsidiaries in accordance with generally accepted accounting principles, or GAAP).

No public market currently exists for the notes, and we do not intend to apply to list the notes on any securities exchange or for quotation on any inter-dealer quotation system. Our common stock is listed on The Nasdaq Global Select Market under the symbol "CYTK." On November 7, 2019, the last reported sale price of our common stock was $8.275 per share.

	Per note	***Total***
Public offering price (1)	*$1,000.00*	*$120,000,000*
Underwriting discount(2)	*$30.00*	*$3,600,000*
Proceeds, before expenses, to us	*$970.00*	*$116,400,000*

(1) Plus accrued interest, if any, from November 13, 2019.
(2) See "Underwriting" for additional disclosure regarding underwriting discounts and commissions and estimated expenses.

Investing in the notes involves risks. See "Risk Factors" beginning on page S-18.

Neither the Securities and Exchange Commission nor any state or foreign securities commission or regulatory authority has approved or disapproved of the notes or the shares of our common stock, if any, issuable upon the conversion of the notes or passed upon the adequacy or accuracy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

We expect to deliver the notes in book-entry form through the facilities of The Depository Trust Company on or about November 13, 2019.

Morgan Stanley *Mizuho Securities*

JMP Securities
H.C. Wainwright & Co.

Prospectus supplement dated November 7, 2019.

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In deciding whether to purchase the notes, you should rely only on the information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus and any related free writing prospectus we authorize for use in connection with this offering. Neither we nor any of the underwriters has authorized anyone to provide you with additional or different information. If anyone provides you with additional or different information, you should not rely on it.

You should not assume that the information included or incorporated by reference in this prospectus supplement or the accompanying prospectus or any related free writing prospectus we authorize for use in connection with this offering is accurate as of any date other than the respective dates of the documents in which the information is contained. Our business, financial condition, results of operations and prospects could have changed since those dates.

You should not consider any information included or incorporated by reference in this prospectus supplement or the accompanying prospectus to be legal, tax or investment advice. You should consult your own counsel, accountant and other advisors for legal, tax, business, financial and related advice regarding any purchase of the notes. Neither we nor any of the underwriters makes any representation regarding the legality of an investment in the notes by any person under applicable investment or similar laws.

This prospectus supplement and the accompanying prospectus do not constitute an offer to sell or the solicitation of an offer to purchase any notes in any jurisdiction or to any person where the offer or solicitation is not permitted.

ABOUT THIS PROSPECTUS SUPPLEMENT

This document consists of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also adds to and updates the information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, gives more general information, some of which may not apply to this offering. If there is a difference between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference, on the other hand, you should rely on the information in this prospectus supplement. Generally, when we refer to the prospectus, we are referring to this prospectus supplement and the accompanying prospectus combined.

We have not, and the underwriters have not, authorized anyone else to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus supplement and the accompanying prospectus, along with the information contained in any permitted free writing prospectuses we have authorized for use in connection with this offering. We take, 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, notes only in jurisdictions where offers and sales are permitted. The information contained in this prospectus supplement and the accompanying prospectus, along with any authorized free writing prospectus is accurate only as of the date of this prospectus supplement or the date of the accompanying prospectus, and the information in the documents incorporated by reference in this prospectus supplement and the accompanying prospectus is accurate only as of the date of those respective documents, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any sale of notes. Our business, financial condition, results of operations and prospects may have changed since those dates. It is important for you to read and consider all information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus in making your investment decision. You should read this prospectus supplement and the accompanying prospectus, as well as the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, any authorized free writing prospectus, and the additional information described under “Where You Can Find More Information” in this prospectus supplement and in the accompanying prospectus, before investing in our securities.

Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus supplement and the accompanying prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons who come into possession of this prospectus supplement, the accompanying prospectus and any free writing prospectus related to this offering in jurisdictions outside the United States are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus supplement, the accompanying prospectus and any such free writing prospectus applicable to that jurisdiction.

This document has been prepared on the basis that any offer of securities in any relevant European Economic Area member state will be made pursuant to an exemption under European prospectus law from the requirement to publish a prospectus for offers of securities and does not constitute an offer to or solicitation of anyone to purchase securities in any jurisdiction in which such offer or solicitation is not authorized, nor to any person to whom it is unlawful to make such an offer or solicitation.

This prospectus supplement and the accompanying prospectus, including the information incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectuses we have authorized for use in connection with this offering, include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus supplement and the accompanying prospectus, and any free writing prospectuses we have authorized for use in connection with this offering, are the property of their respective owners.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information appearing elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus, and does not contain all of the information that you need to consider in making your investment decision. This prospectus supplement and the accompanying prospectus include information about the securities that we are offering, as well as information regarding our business. You should read this prospectus supplement and the accompanying prospectus, including the information incorporated by reference herein and therein, our filings with the SEC and any free writing prospectus that we have authorized for use in connection with this offering, in their entirety. You should carefully consider the information set forth under "Risk Factors" beginning on page S-18 of this prospectus supplement and in our other SEC filings before making your investment decision.

OVERVIEW

We are a late-stage biopharmaceutical company focused on discovering, developing and commercializing first-in-class muscle activators and next-in-class muscle inhibitors as potential treatments for debilitating diseases in which muscle performance is compromised and/or declining. We have discovered and are developing muscle-directed investigational medicines that may potentially improve the health span of people with devastating cardiovascular and neuromuscular diseases of impaired muscle function. Our research and development activities relating to the biology of muscle function have evolved from our knowledge and expertise regarding the cytoskeleton, a complex biological infrastructure that plays a fundamental role within every human cell. As a leader in muscle biology and the mechanics of muscle performance, we are developing small molecule drug candidates specifically engineered to impact muscle function and contractility.

Our drug candidates currently in clinical development are: omecamtiv mecarbil, a novel cardiac myosin activator which we are developing for the potential treatment of heart failure, reldesemtiv, a novel fast skeletal muscle troponin activator, or FSTA, which we are developing for the potential treatment of amyotrophic lateral sclerosis, or ALS, and spinal muscular atrophy, or SMA, CK-3773274, or CK-274, a novel cardiac myosin inhibitor, which we are developing for the potential treatment of hypertrophic cardiomyopathy, or HCM, and AMG 594, a novel cardiac troponin activator which is the subject of a Phase 1 clinical study.

Omecamtiv mecarbil is being evaluated for the potential treatment of heart failure under a strategic alliance established in 2006 with Amgen to discover, develop, and commercialize novel small molecule therapeutics designed to activate cardiac muscle contractility pursuant to the collaboration and option agreement dated December 29, 2006, as amended, or the Amgen Agreement. Amgen, in collaboration with Cytokinetics, is conducting GALACTIC-HF (**G**lobal **A**pproach to **L**owering **A**dverse **C**ardiac Outcomes **T**hrough **I**mproving **C**ontractility in **H**eart Failure), a Phase 3 cardiovascular outcomes clinical trial of omecamtiv mecarbil in heart failure. In collaboration with Amgen, we are conducting METEORIC-HF, a second Phase 3 clinical trial intended to evaluate its potential to increase exercise performance.

AMG 594 was discovered under our joint research program with Amgen. In collaboration with Cytokinetics, Amgen is conducting a randomized, placebo-controlled, double-blind, single and multiple ascending dose, single-center Phase 1 study to assess the safety and tolerability, pharmacokinetics and pharmacodynamics of AMG 594 in healthy subjects.

Reldesemtiv selectively activates the fast skeletal muscle troponin complex in the sarcomere by increasing its sensitivity to calcium, leading to an increase in skeletal muscle contractility. Under the Amended and Restated License and Collaboration Agreement dated December 22, 2014, as amended, or the Astellas Agreement. Astellas holds an exclusive license to develop and commercialize reldesemtiv worldwide, subject to our development and commercialization participation rights. We are currently in discussions with Astellas regarding amending the terms of our collaboration agreement, which for reldesemtiv may lead to a change in such development and commercialization rights.

In collaboration with Astellas, we conducted a Phase 2 clinical trial of reldesemtiv in patients with SMA and a Phase 2 clinical trial of reldesemtiv in patients with ALS, called FORTITUDE-ALS (**F**unctional **O**utcomes in a **R**andomized **T**rial of **I**nvestigational **T**reatment with CK-2127107 to **U**nderstand **D**ecline in **E**ndpoints—in **ALS**). Astellas, in collaboration with us, conducted a Phase 2 clinical trial of reldesemtiv in patients with chronic obstructive pulmonary disease, or COPD, and a Phase 1b clinical trial of reldesemtiv in elderly subjects with limited mobility.

CK-274 is a novel, oral, small molecule cardiac myosin inhibitor that we discovered independent of our collaborations.CK-274 arose from an extensive chemical optimization program conducted with attention to therapeutic index and pharmacokinetic properties that may translate into next-in-class potential in clinical development.CK-274 was designed to reduce the hypercontractility that is associated with HCM. In preclinical models, CK-274 reduces myocardial contractility by binding directly to cardiac myosin at a distinct and selective allosteric binding site, thereby preventing myosin from entering a force producing state. CK-274 reduces the number of active actin-myosin cross bridges during each cardiac cycle and consequently reduces myocardial contractility. This mechanism of action may be therapeutically effective in conditions characterized by excessive hypercontractility, such as HCM. We completed a Phase 1 study which met its primary and secondary objectives to assess the safety and tolerability of single and multiple oral doses of CK-274, describe the pharmacokinetics of CK-274 and its pharmacodynamic effects as measured by echocardiography, as well as to characterize the PK/PD relationship with regards to cardiac function. These data support the advancement of CK-274 into a Phase 2 clinical trial in patients with obstructive HCM which is expected to begin in the fourth quarter of 2019.

Our research continues to drive innovation and leadership in muscle biology. All of our drug candidates have arisen from our cytoskeletal research activities. Our focus on the biology of the cytoskeleton distinguishes us from other biopharmaceutical companies, and potentially positions us to discover and develop novel therapeutics that may be useful for the treatment of severe diseases and medical conditions. Each of our drug candidates has a novel mechanism of action compared to currently marketed drugs, which we believe validates our focus on the cytoskeleton as a productive area for drug discovery and development. We intend to leverage our experience in muscle contractility to expand our current pipeline and expect to identify additional potential drug candidates that may be suitable for clinical development.

RESEARCH AND DEVELOPMENT PROGRAMS

Our long-standing interest in the cytoskeleton has led us to focus our research and development activities on the biology of muscle function and, in particular, small molecule modulation of muscle contractility. We believe that our expertise in the modulation of muscle contractility is an important differentiator for us. Our preclinical and clinical experience in muscle contractility may position us to discover and develop additional novel therapies that have the potential to improve the health of patients with severe and debilitating diseases or medical conditions.

Small molecules that affect muscle contractility may have several applications for a variety of serious diseases and medical conditions. For example, heart failure is a disease often characterized by impaired cardiac muscle contractility which may be treated by modulating the contractility of cardiac muscle. Similarly, certain diseases and medical conditions associated with muscle weakness may be amenable to treatment by enhancing the contractility of skeletal muscle. Because the modulation of the contractility of different types of muscle, such as cardiac and skeletal muscle, may be relevant to multiple diseases or medical conditions, we believe we can leverage our expertise in these areas to more efficiently discover and develop potential drug candidates that modulate the applicable muscle type for multiple indications.

We segment our research and development activities related to muscle contractility by our cardiac muscle contractility program and our skeletal muscle contractility program. We also conduct research and development on novel treatments for disorders involving muscle function beyond muscle contractility.

Cardiac Muscle Program

Our cardiac muscle contractility program is focused on the cardiac sarcomere, the basic unit of muscle contraction in the heart. The cardiac sarcomere is a highly ordered cytoskeletal structure composed of cardiac myosin, actin and a set of regulatory proteins. Cardiac myosin is the cytoskeletal motor protein in the cardiac muscle cell. It is directly responsible for converting chemical energy into the mechanical force, resulting in cardiac muscle contraction. Our most advanced cardiac program is based on the hypothesis that activators of cardiac myosin may address certain adverse properties of existing positive inotropic agents. Current positive inotropic agents, such as beta-adrenergic receptor agonists or inhibitors of phosphodiesterase activity, increase the concentration of intracellular calcium, thereby increasing cardiac sarcomere contractility. The effect on calcium levels, however, also has been linked to potentially life-threatening side effects. In contrast, our novel cardiac myosin activators work by a mechanism that directly stimulates the activity of the cardiac myosin motor protein, without increasing the intracellular calcium concentration. They accelerate the rate-limiting step of the myosin enzymatic cycle and shift it in favor of the force-producing state. Rather than increasing the velocity of cardiac contraction, this mechanism instead lengthens the systolic ejection time, which results in increased cardiac function in a potentially more oxygen-efficient manner.

Our earlier stage cardiac program is based on the hypothesis that inhibitors of hyperdynamic contraction and obstruction of left ventricular blood flow may counteract the pathologic effects of mutations in the sarcomere that lead to hypertrophic cardiomyopathies. A targeted oral therapy addressing this disease etiology may improve symptoms, exercise capacity and potentially slow disease progression.

Amgen Strategic Alliance

Our strategic alliance with Amgen to discover, develop, and commercialize novel small molecule therapeutics designed to activate cardiac muscle, including omecamtiv mecarbil, for the potential treatment of heart failure is governed by the Amgen Agreement. Amgen has exclusive, worldwide rights to develop and commercialize omecamtiv mecarbil and related compounds subject to our specified development and commercial participation rights. Amgen has also entered an alliance with Les Laboratoires Servier and Institut de Recherches Internationales, or Servier, for exclusive commercialization rights for omecamtiv mecarbil in Europe as well as the Commonwealth of Independent States, including Russia; Servier contributes funding for development and provides strategic support to the program.

Under the Amgen Agreement we are eligible for potential additionalpre-commercialization and commercialization milestone payments of over $600.0 million in the aggregate on omecamtiv mecarbil and other potential products arising from research under the collaboration, and royalties that escalate based on increasing levels of annual net sales of products commercialized under the agreement.

The Amgen Agreement provided for us to receive increased royalties byco-funding the Phase 3 development program for omecamtiv mecarbil and other drug candidates under the collaboration. We fully exercised this option for omecamtiv mecarbil, or the Co-Invest Option, and co-invested $40.0 million in the Phase 3 development program of omecamtiv mecarbil in exchange for a total incremental royalty from Amgen of up to 4% on increasing worldwide sales of omecamtiv mecarbil outside Japan and the right to co-promote omecamtiv mecarbil in institutional care settings in North America, with reimbursement by Amgen for certain sales force activities. A joint commercial operating team comprising representatives of Cytokinetics and Amgen will be responsible for the day-to-day management of the commercialization program of omecamtiv mecarbil.

Amgen generally has discretion to elect whether to pursue or abandon the development of omecamtiv mecarbil and may terminate our strategic alliance for any reason upon six months' prior notice. With our consent, Amgen granted Servier an option to commercialize omecamtiv mecarbil in Europe and the CIS, including Russia, which Servier decided to exercise. In August 2016, we entered into a letter agreement with Amgen and Servier,

which provides that if Amgen's rights to omecamtiv mecarbil are terminated with respect to the territory subject to Servier's sublicense, the sublicensed rights previously granted by Amgen to Servier with respect to omecamtiv mecarbil, will remain in effect and become a direct license or sublicense of such rights by us to Servier, on substantially the same terms as those in the Option, License and Collaboration Agreement between Amgen and Servier.

Omecamtiv mecarbil

Our lead drug candidate from our cardiac contractility program is omecamtiv mecarbil, a novel cardiac myosin activator. We expect omecamtiv mecarbil to be developed as a potential treatment across the continuum of care in heart failure both for use in the hospital setting and for use in the outpatient setting. Omecamtiv mecarbil is the subject of a Phase 3 development program in patients with heart failure with reduced ejection fraction under our strategic alliance with Amgen.

Omecamtiv mecarbil: Clinical Development

COSMIC-HF: COSMIC-HF (**C**hronic **O**ral **S**tudy of **M**yosin Activation to **I**ncrease **C**ontractility in **H**eart **F**ailure) was a double-blind, randomized, placebo-controlled, multicenter, Phase 2 trial designed to evaluate an oral formulation of omecamtiv mecarbil in chronic heart failure patients with reduced ejection fraction, conducted by Amgen in collaboration with Cytokinetics. The trial consisted of two parts, a dose escalation phase and a larger and longer expansion phase. The dose escalation phase, which completed in 2013, assessed the pharmacokinetics and tolerability of three oral modified-release formulations of omecamtiv mecarbil and was used to select one formulation for further evaluation in the expansion phase.

The expansion phase, which was completed in 2015, evaluated 448 chronic heart failure patients with reduced ejection fraction who were dosed with the selected oral formulation of omecamtiv mecarbil for 20 weeks and followed for a total of 24 weeks. The primary endpoints for the expansion phase were to assess the maximum and pre-dose plasma concentration of omecamtiv mecarbil. The secondary endpoints were to assess changes from baseline in systolic ejection time, stroke volume, left ventricular end-systolic diameter, left ventricular end-diastolic diameter, heart rate and NT-proBNP (a biomarker associated with the severity of heart failure) at week 20, as well as the safety and tolerability of omecamtiv mecarbil including incidence of adverse events from baseline to week 24.

Post-hoc analyses of the data from COSMIC-HF indicate that, in patients with chronic heart failure and reduced systolic function, omecamtiv mecarbil had no effect on the duration of diastolic filling. In addition, we believe that these post-hoc analyses also indicate that treatment with omecamtiv mecarbil was associated with decreases in pulmonary pressures and a small increase in the duration of isovolumic relaxation time, which may indicate improved diastolic function. Additional analyses supporting these conclusions will be presented at the 2019 American Heart Association (AHA) Scientific Sessions Meeting to be held from November 16-18, 2019 in Philadelphia, Pennsylvania.

GALACTIC-HF: GALACTIC-HF is a Phase 3 cardiovascular outcomes clinical trial of omecamtiv mecarbil which is being conducted by Amgen, in collaboration with Cytokinetics. The primary objective of this double-blind, randomized, placebo-controlled multicenter clinical trial is to determine if treatment with omecamtiv mecarbil when added to standard of care is superior to standard of care plus placebo in reducing the risk of cardiovascular death or heart failure events in patients with high risk chronic heart failure and reduced ejection fraction. GALACTIC-HF is being conducted under a Special Protocol Assessment, or SPA, with the FDA. GALACTIC-HF enrolled over 8,200 symptomatic chronic heart failure patients with reduced ejection fraction in over 900 sites in 35 countries who were either currently hospitalized for a primary reason of heart failure or had had a hospitalization or admission to an emergency room for heart failure within one year prior to screening. Patients are randomized to either placebo or omecamtiv mecarbil with dose titration up to a maximum dose of 50 mg twice daily based on the plasma concentration of omecamtiv mecarbil after initiation of drug therapy. The

primary endpoint is a composite of time to cardiovascular death or first heart failure event, whichever occurs first, with heart failure event defined as hospitalization, emergency room visit, or urgent unscheduled clinic visit for heart failure. Secondary endpoints include time to cardiovascular death; patient reported outcomes as measured by the Kansas City Cardiomyopathy Questionnaire Total Symptom Score; time to first heart failure hospitalization; and time to all-cause death.

In March 2019, we, Amgen and Servier announced that the Data Monitoring Committee, or the DMC, for GALACTIC-HF recently completed the first planned interim analysis, which included consideration of pre-specified criteria for futility. The DMC reviewed data from GALACTIC-HF and recommended that GALACTIC-HF continue without changes to its conduct. The futility analysis was triggered once apre-specified number of cardiovascular deaths had occurred in GALACTIC-HF as stipulated by the trial's protocol. The futility analysis allowed the potential for stopping GALACTIC-HF early had the interim analysis shown a low likelihood of the trial demonstrating a clinically meaningful and statistically significant benefit on the primary endpoint in patients receiving omecamtiv mecarbil, plus standard of care, compared to patients receiving placebo plus standard of care.

In July 2019, we announced the completion of patient enrollment in GALACTIC-HF, with patient enrollment of approximately 40% in United States and Canada, Western Europe, South Africa, and Australasia; 33% in Eastern Europe and Russia; 19% in Latin America and 8% in Asia. Approximately 25% of patients in GALACTIC-HF were hospitalized at the time of randomization.

METEORIC-HF: In collaboration with Amgen, we are conducting METEORIC-HF, a second Phase 3 clinical trial intended to evaluate its potential to increase exercise performance. Patients are being randomized in a 2:1 fashion to omecamtiv mecarbil, which will be started at 25 mg twice daily and titrated to 25, 37.5 or 50 mg twice daily based on the same PK-guided dosing regimen as is used in GALACTIC-HF, or to placebo. METEORIC-HF is planned to enroll approximately 270 symptomatic chronic heart failure patients in nine countries. The primary endpoint of METEORIC-HF is change in peak oxygen uptake on Cardio-Pulmonary Exercise Testing, or CPET, from baseline to Week 20. Secondary endpoints include change in total workload during CPET from baseline to Week 20, change in ventilatory efficiency during CPET from baseline to Week 20 and change in the average daily activity units measured over 2 weeks from baseline to Week 18-20.

AMG 594

AMG 594 is a novel, selective, oral, small molecule cardiac troponin activator which was discovered under our joint research program with Amgen. In preclinical models, AMG 594 increases myocardial contractility by binding to cardiac troponin through an allosteric mechanism that sensitizes the cardiac sarcomere to calcium, facilitating more actin-myosin cross bridge formation during each cardiac cycle thereby resulting in increased myocardial contractility. Similar to cardiac myosin activation, preclinical research has shown that cardiac troponin activation does not change the calcium transient of cardiac myocytes.

AMG 594: Clinical Development

In collaboration with Cytokinetics, Amgen is conducting a randomized, placebo-controlled, double-blind, single and multiple ascending dose, single-center Phase 1 study to assess the safety and tolerability, pharmacokinetics and pharmacodynamics of AMG 594 in healthy subjects. The study design includes several single ascending dose cohorts and three multiple ascending dose cohorts, with eight healthy subjects per cohort.

CK-274

CK-274 is a novel, oral, small molecule cardiac myosin inhibitor that our company scientists discovered independent of our collaborations. CK-274 arose from an extensive chemical optimization program conducted with attention to therapeutic index and pharmacokinetic properties that may translate into next-in-class potential

in clinical development. CK-274 was purposely designed to reduce the hypercontractility that is associated with HCM. In preclinical models,CK-274 reduces myocardial contractility by binding directly to cardiac myosin at a distinct and selective allosteric binding site, thereby preventing myosin from entering a force producing state. CK-274 reduces the number of active actin-myosin cross bridges during each cardiac cycle and consequently reduces myocardial contractility. This mechanism of action may be therapeutically effective in conditions characterized by excessive hypercontractility, such as HCM. The preclinical pharmacokinetics of CK-274 were characterized evaluated and optimized for potential rapid onset, ease of titration and rapid symptom relief in the clinical setting. The initial focus of the development program for CK-274 will include an extensive characterization of its PK/PD relationship as has been a hallmark of Cytokinetics' industry-leading development programs in muscle pharmacology. The overall development program will assess the potential of CK-274 to improve exercise capacity and relieve symptoms in patients with hyperdynamic ventricular contraction due to HCM.

CK-274: Clinical Development

We conducted a Phase 1 double-blind, randomized, placebo-controlled, multi-part, single and multiple ascending dose clinical trial ofCK-274 to assess the safety and tolerability, pharmacokinetics and pharmacodynamics of CK-274 in healthy subjects. In September 2019 we presented data from the Phase 1 study of CK-274 at the Heart Failure Society of America, or HFSA, 23rd Annual Scientific Meeting in Philadelphia. The study met its primary and secondary objectives to assess the safety and tolerability of single and multiple oral doses of CK-274, describe the pharmacokinetics, or PK, of CK-274 and its pharmacodynamic effects, or PD, as measured by echocardiography, as well as to characterize the PK/PD relationship with regards to cardiac function. These data support the advancement of CK-274 into a Phase 2 clinical trial in patients with HCM, which is expected to begin in the fourth quarter of 2019. We have continued protocol development, feasibility assessments, regulatory interactions and other readiness activities for a Phase 2 clinical trial of CK-274, which we expect to begin in the fourth quarter of this year.

Skeletal Muscle Contractility Program

Our skeletal muscle contractility program is focused on the activation of the skeletal sarcomere, the basic unit of skeletal muscle contraction. The skeletal sarcomere is a highly ordered cytoskeletal structure composed of skeletal muscle myosin, actin, and a set of regulatory proteins, which include the troponins and tropomyosin. This program leverages our expertise developed in our ongoing discovery and development of cardiac sarcomere activators, including the cardiac myosin activator, omecamtiv mecarbil.

We believe that our skeletal sarcomere activators may lead to new therapeutic options for diseases and medical conditions associated with neuromuscular dysfunction and potentially also conditions associated with aging and muscle weakness and wasting. The clinical effects of muscle weakness and wasting, fatigue and loss of mobility can range from decreased quality of life to, in some instances, life-threatening complications. By directly improving skeletal muscle function, a small molecule activator of the skeletal sarcomere potentially could enhance functional performance and quality of life in patients suffering from diseases or medical conditions associated with skeletal muscle weakness or wasting, such as ALS, SMA, COPD or sarcopenia (general frailty associated with aging).

Astellas Strategic Alliance

Our strategic alliance with Astellas to advance novel therapies for diseases and medical conditions associated with muscle impairment and weakness is governed by the Astellas Agreement. We initially exclusively licensed to Astellas rights to co-develop and potentially co-commercialize reldesemtiv and other FSTAs in non-neuromuscular indications and to develop and commercialize other novel mechanism skeletal muscle activators in all indications, subject to certain Cytokinetics' development and commercialization rights.

Subsequently, we and Astellas expanded the strategic alliance to include certain neuromuscular indications, including SMA, for reldesemtiv and other FSTAs and to advance reldesemtiv into Phase 2 clinical development, initially in SMA. In 2016, we and Astellas further expanded the strategic alliance to include the development of reldesemtiv for the potential treatment of ALS, as well as the possible development in ALS of other FSTAs previously licensed by us to Astellas, and granted Astellas an option for a global collaboration for the development and commercialization of our first-generation FSTA, tirasemtiv, or the Option on Tirasemtiv.

The strategic alliance with Astellas includes a joint research program focused on the discovery of additional next-generation skeletal muscle activators, including sponsored research at Cytokinetics. This research program has been extended through 2019.

We have options to conduct early-stage development for certain agreed indications at our initial expense, subject to reimbursement if development continues under the strategic alliance; to co-promote collaboration products containing FSTAs for neuromuscular indications in the U.S., Canada and Europe; and to co-promote the other collaboration products in the U.S. and Canada. Astellas will reimburse us for certain expenses associated with our co-promotion activities.

Astellas has been primarily responsible for the development of reldesemtiv in ALS, but we conductedFORTITUDE-ALS and previously agreed to share in the operational responsibility for subsequent clinical trials. While we and Astellas have agreed in principle to revise the terms of our collaboration with respect to FSTAs, including reldesemtiv and CK-3762601, or CK-601, and are in negotiations to do so (as described under "*Proposed Amendments to Astellas Collaboration*" below), under our agreement as it currently stands subject to specified guiding principles, decision making has been by consensus, subject to escalation and, if necessary, Astellas' final decision-making authority on the development (including regulatory affairs), manufacturing, medical affairs and commercialization of reldesemtiv and other FSTAs in ALS. In addition, under the current agreement, we and Astellas had agreed to share equally the costs of developing reldesemtiv in ALS for potential registration and marketing authorization in the U.S. and Europe, provided that (i) Astellas agreed to solely fund Phase 2 development costs of reldesemtiv in ALS subject to a right to recoup our share of such costs plus a 100% premium on such amounts by reducing future milestone and royalty payments to us and (ii) we may defer (but not eliminate) a portion of our co-funding obligation for development activities after Phase 2 for up to 18 months, subject to certain conditions.

Under the current terms of the Astellas Agreement, based on the achievement of pre-specified criteria, we are eligible to receive milestone payments relating to the development and commercial launch of collaboration products. We may also receive payments for achievement of pre-specified sales milestones related to net sales of all collaboration products.

Currently under the Astellas Agreement, if Astellas were to commercialize any collaboration products, we would receive royalties on sales of such collaboration products. In addition to the foregoing development, commercial launch and sales milestones, we may also receive payments for the achievement of pre-specified milestones relating to the joint research program.

Astellas currently has general discretion to elect whether to pursue or abandon the development of reldesemtiv and other collaboration products, in whole or in part. Astellas may terminate our strategic alliance in whole or in part for any reason upon six months' prior notice at any time following expiration of the strategic alliance's research term, which is currently set to expire on December 31, 2019.

Proposed Amendments to Astellas Collaboration

Cytokinetics and Astellas have agreed in principle to revise the terms of the collaboration to provide that Cytokinetics will obtain exclusive control over the development and commercialization of FSTAs, including

reldesemtiv and CK-601. Astellas's future financial support for FSTAs would consist of paying a portion of our third party Phase 3 development costs for reldesemtiv in ALS. Astellas would also provide certain non-cash contributions to Cytokinetics, including the transfer of current inventory of the active pharmaceutical ingredient for reldesemtiv and the continued conduct of ongoing stability studies. In return, Astellas would receive low- to mid-single digit royalties on potential sales of reldesemtiv in North America and Europe and a low single digit royalty onCK-601. Under these revised terms, Cytokinetics would have exclusive commercialization rights to FSTAs and would account for all potential sales but would no longer receive milestone or royalty payments from Astellas. We and Astellas also have an agreement in principle to extend the research term of the collaboration and sponsored research at Cytokinetics through December 31, 2020, with the objective of identifying a potential development candidate among novel-mechanism skeletal muscle activators other than FSTAs.

We expect to enter into definitive agreements with Astellas on these terms, but until we do so, the Astellas Agreement remains in effect in accordance with its current terms, the agreements in principle remain non-binding, and there can be no assurance we will enter into definitive agreements with Astellas regarding any revised terms.

Reldesemtiv

Reldesemtiv selectively activates the fast skeletal muscle troponin complex in the sarcomere by increasing its sensitivity to calcium, leading to an increase in skeletal muscle contractility. Reldesemtiv has demonstrated pharmacological activity in preclinical models and evidence of potentially clinically relevant pharmacodynamic effects in humans. In July 2019, we announced that the European Medicines Agency has granted orphan medicinal product designation to reldesemtiv for the potential treatment of SMA. The FDA previously granted reldesemtiv orphan drug designation for the potential treatment of SMA in 2017.

Reldesemtiv: Clinical Development

SMA: In June 2018, we announced data at the 2018 Annual Cure SMA Conference in Dallas from a hypothesis-generating, Phase 2 double-blind, randomized, placebo-controlled clinical study in patients with SMA which was designed to determine potential pharmacodynamic effects of a suspension formulation of reldesemtiv following 8 weeks of oral dosing in each of two cohorts of 36 patients with Type II, Type III, or Type IV disease. Secondary objectives were to evaluate the safety, tolerability and pharmacokinetics of reldesemtiv. The study showed statistically significant concentration-dependent increases in changes from baseline in Six Minute Walk Distance, or 6MWD, a sub-maximal exercise test of aerobic capacity and endurance. The study also showed statistically significant increases for Maximal Expiratory Pressure, or MEP, a measure of strength of respiratory muscles. Other assessments, including the Hammersmith Functional Motor Score—Extended, Revised Upper Limb Module, Timed Up-and-Go, Forced Vital Capacity, and the SMA Health Index, or SMA-HI, a patient reported outcome measure, or PROM, developed to comply with FDA standards for PROMs, did not demonstrate differences between reldesemtiv versus placebo. Adverse events were similar between groups receiving reldesemtiv and placebo.

Additional results presented at the 2018 Muscle Study Group Scientific Meeting in Oxford, U.K. showed sustained increases in 6MWD and MEP four weeks after discontinuation of study drug (i.e., follow-up). A post-hoc analysis also showed that changes from baseline in the 6MWD at 450 mg twice daily were significantly correlated with changes from baseline on certain domains of the SMA-HI intended to reflect improved endurance, especially Fatigue and Activity Participation. Decreases in SMA-HI scores reflect reduced disease burden as measured by that PROM, suggesting that as 6MWD increased, disease burden assessed by that domain of the SMA-HI was reduced.

In January 2019, we announced that we received feedback from the FDA that the 6MWD is an acceptable primary efficacy endpoint for a potential registration program for reldesemtiv in patients with SMA who have maintained ambulatory function. The FDA also recommended adding a global function scale as a secondary endpoint.

In June 2019, we announced that data from two preclinical studies of reldesemtiv were presented at the 2019 Annual Cure SMA Conference in Anaheim, CA, showing that the addition of reldesemtiv to treatment with SMN upregulators (nusinersen and SMN-C1, an analogue to risdiplam) significantly increased muscle force in a mouse model of SMA. We were granted European Orphan Designation for reldesemtiv for the potential treatment of SMA by the EMA.

ALS: In collaboration with Astellas, we conducted FORTITUDE-ALS. This trial enrolled 458 eligible ALS patients who were randomized (1:1:1:1) to receive either 150 mg, 300 mg or 450 mg of reldesemtiv or placebo dosed orally twice daily for 12 weeks. The primary efficacy endpoint of FORTITUDE-ALS was the change from baseline in the percent predicted slow vital capacity, or SVC, at 12 weeks. Secondary endpoints included slope of the change from baseline in the mega-score of muscle strength measured by hand held dynamometry and handgrip dynamometry in patients on reldesemtiv; change from baseline in the ALS Functional Rating Scale—Revised, or ALSFRS-R; incidence and severity of treatment-emergent adverse events; and plasma concentrations of reldesemtiv at the sampled time points during the study. Exploratory endpoints measured included the effect of reldesemtiv versus placebo on self-assessments of respiratory function made at home by the patient with help as needed by the caregiver; disease progression through quantitative measurement of speech production characteristics over time; disease progression through quantitative measurement of handwriting abilities over time; and the change from baseline in quality of life (as measured by the ALS Assessment Questionnaire-5, or ALSAQ-5) in patients on reldesemtiv.

In May 2019, we announced that results of FORTITUDE-ALS were presented at the American Academy of Neurology Annual Meeting in Philadelphia. FORTITUDE-ALS did not achieve statistical significance for a pre-specified dose-response relationship in its primary endpoint of change from baseline in SVC after 12 weeks of dosing (p=0.11). Similar analyses of ALSFRS-R and slope of the Muscle Strength Mega-Score yielded p-values of 0.09 and 0.31, respectively. However, patients on all dose groups of reldesemtiv declined numerically less than patients on placebo for SVC and ALSFRS-R, with larger differences emerging over time.

While the dose-response analyses for the primary and secondary endpoints did not achieve statistical significance at the level of 0.05, in a post-hoc analysis pooling the doses together, patients who received reldesemtiv in FORTITUDE-ALS declined less than patients who received placebo. The trial showed numerical effects favoring reldesemtiv across dose levels and timepoints with clinically meaningful magnitudes of effect observed at 12 weeks for the primary and secondary endpoints. The differences between reldesemtiv and placebo in SVC and ALSFRS-R total score observed after 12 weeks of treatment were still evident at follow-up, four weeks after the last dose of study drug.

The incidence of early treatment discontinuations, serious adverse events and clinical adverse events in FORTITUDE-ALS were similar between placebo and active treatment arms. The most common clinical adverse effects in the trial included fatigue, nausea and headache. The leading cause for early termination from FORTITUDE-ALS for patients who received placebo was progressive disease; the leading cause for early termination for patients who received reldesemtiv was a decline in cystatin C based estimated glomerular filtration rate, or eGFR, a measure of renal function. Elevations in transaminases and declines in cystatin C eGFR were dose-related.

We presented a post-hoc analyses from FORTITUDE-ALS (Functional Outcomes in a Randomized Trial of Investigational Treatment with CK-2127107 to Understand Decline in Endpoints—in ALS), at the 2019 Northeast Amyotrophic Lateral Sclerosis (NEALS) Meeting in Clearwater Beach, FL. The analyses

demonstrated that, in the combined middle and faster progressing tertiles of patients, the decline in the ALSFRS-R total score from baseline to week 12 in patients who received any dose of reldesemtiv was significantly smaller than the decline on placebo, while no significant difference between reldesemtiv and placebo was observed in slower progressing patients.

In the third quarter of 2019, we held regulatory interactions and conducted feasibility and other planning activities in preparation for the potential advancement of reldesemtiv to a Phase 3 trial in patients in ALS in 2020.

COPD: Astellas, in collaboration with Cytokinetics, conducted a Phase 2 clinical trial of reldesemtiv in patients with COPD designed to assess the effect of reldesemtiv on physical function in patients with COPD. In October 2018, we announced that this trial did not meet the primary endpoint and did not demonstrate a statistically significant treatment difference in any of the secondary endpoints. Adverse events were similar between groups receiving *reldesemtiv* and placebo.

Frailty: Astellas, in collaboration with Cytokinetics, conducted a Phase 1b clinical trial of reldesemtiv in elderly subjects with limited mobility. In October 2018, we announced that an interim analysis of this study had been conducted, the Independent Data Monitoring Committee for this trial determined that the pre-defined criteria for lack of efficacy of reldesemtiv had been met and Astellas had notified investigators to halt further enrollment in the trial.

The clinical trials program for reldesemtiv may proceed for several years, and we may not generate any revenues or material net cash flows from sales of this drug candidate until the program is successfully completed, regulatory approval is achieved, and the drug is commercialized. We cannot predict if or when this may occur.

Our expenditures will increase if Astellas terminates development of reldesemtiv or related compounds and we elect to develop them independently, or if we conduct early-stage development for certain agreed indications at our initial expense, subject to reimbursement if development continues under the collaboration.

CK-601

In October 2018, we announced that we and Astellas are advancingCK-601, a next-generation FSTA, into IND-enabling studies, which triggered a $2.0 million milestone payment from Astellas to us. CK-601 was designed in a joint research program conducted by the companies' scientists to have different pharmacokinetics and physicochemical properties than *reldesemtiv* which may inform its development for the treatment of diseases and conditions associated with both neuromuscular and non-neuromuscular etiology and pathogenesis.

Ongoing Research in Skeletal Muscle Activators

Our research program with Astellas has been extended through 2019 and we and Astellas have agreed in principle to extend the research program through 2020. Currently, our research on the direct activation of skeletal muscle continues in two areas. We are conducting translational research in preclinical models of disease and muscle function with FSTAs to explore the potential clinical applications of this novel mechanism in diseases or conditions associated with skeletal muscle dysfunction. We also are conducting preclinical research on other chemically and pharmacologically distinct mechanisms to activate the skeletal sarcomere, which we have agreed in principle to be the focus for our continued joint research program with Astellas in 2020.

BEYOND MUSCLE CONTRACTILITY

We developed preclinical expertise in the mechanics of skeletal, cardiac and smooth muscle that extends from proteins to tissues to intact animal models. Our translational research in muscle contractility has enabled us

to better understand the potential impact of small molecule compounds that increase skeletal or cardiac muscle contractility and to apply those findings to the further evaluation of our drug candidates in clinical populations. In addition to contractility, other major functions of muscle play a role in certain diseases that could benefit from novel mechanism treatments. Accordingly, our knowledge of muscle contractility may serve as an entry point to the discovery of novel treatments for disorders involving muscle functions other than muscle contractility. We are leveraging our current understandings of muscle biology to investigate new ways of modulating these other aspects of muscle function for other potential therapeutic applications.

FINANCIAL OVERVIEW

Our revenue to date has been generated primarily from collaboration and license revenue pursuant to our collaboration agreements including our agreements with Amgen and Astellas. We have not generated any commercial product revenue and have continued to incur operating losses. Our operating expenses increased from 2017 through 2018, and we expect that they will continue to increase in 2019 and beyond as we accelerate our efforts to advance our development pipeline and prepare for potential commercial launch of omecamtiv mecarbil.

COMPANY INFORMATION

We were incorporated in Delaware in August 1997 as Cytokinetics, Incorporated. We conduct our administration, finance, business development, clinical development, commercial development, quality assurance and regulatory affairs activities primarily from our headquarters located at 280 East Grand Avenue, South San Francisco, California. Our general telephone number at that address is (650) 624-3000 and our website is www.cytokinetics.com. We do not incorporate by reference into this prospectus supplement or accompanying prospectus the information on, or accessible through, our website, and you should not consider it as part of this prospectus supplement or accompanying prospectus.

CYTOKINETICS and our logo used alone and with the mark CYTOKINETICS are our registered service marks and trademarks. Other service marks, trademarks and trade names referred to in this prospectus supplement and the accompanying prospectus are the property of their respective owners.

THE OFFERING

The summary below describes the principal terms of the notes. Certain of the terms of the notes described below are subject to important limitations and exceptions that are described in more detail under the caption "Description of Notes." As used in this section, "we," "our" and "us" refer to Cytokinetics, Incorporated and not to its subsidiaries.

Issuer	Cytokinetics, Incorporated.
Notes	$120,000,000 aggregate principal amount of 4.00% convertible senior notes due 2026. We have granted the underwriters an option, exercisable for a period of 30 days from the date of this prospectus supplement, to purchase up to an additional $18,000,000 aggregate principal amount of notes, solely to cover over-allotments.
Ranking	The notes will be our general, unsecured obligations and will: • rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to the notes; • rank equal in right of payment with all of our indebtedness that is not so subordinated; • effectively rank junior to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and • rank structurally junior to all indebtedness and other liabilities of our subsidiaries (including trade payables, but excluding intercompany obligations and liabilities of a type not required to be reflected on a balance sheet of such subsidiaries in accordance with GAAP). As of September 30, 2019, we had $45 million aggregate principal amount of indebtedness, all of which was senior secured indebtedness under the loan and security agreement, dated as of May 17, 2019, by and among us, Oxford Finance LLC and Silicon Valley Bank, as amended, or the Term Loan. After giving effect to the issuance of the notes (assuming no exercise of the underwriters' over-allotment option), our total consolidated indebtedness for borrowed money would have been approximately $165 million in principal amount.
Maturity	November 15, 2026, unless earlier repurchased, redeemed or converted.
Interest	4.00% per annum, payable semi-annually in arrears on May 15 and November 15 of each year, beginning on May 15, 2020. In addition, special interest, if any,

	will accrue on the notes, at our election, as the sole remedy relating to the failure to comply with our reporting obligations, as described under "Description of Notes—Events of Default—Special Interest as Sole Remedy for Certain Reporting Defaults."
Conversion Rights	Noteholders may convert their notes at their option only in the following circumstances: • during any calendar quarter commencing after the calendar quarter ending on March 31, 2020 (and only during such calendar quarter), if the last reported sale price per share of our common stock for each of at least 20 trading days, whether or not consecutive, during the period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter exceeds 130% of the conversion price on the applicable trading day; • during the five consecutive business days immediately after any 10 consecutive trading day period (such 10 consecutive trading day period, the "measurement period") if the "trading price" (as defined in this prospectus supplement) per $1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price per share of our common stock on such trading day and the conversion rate on such trading day; • upon the occurrence of certain corporate events or distributions on our common stock, as described in this prospectus supplement; • if we call the notes for redemption; and • at any time from, and including, July 15, 2026 until the close of business on the scheduled trading day immediately before the maturity date. We will settle conversions by paying or delivering, as applicable, cash, shares of our common stock or a combination of cash and shares of our common stock, at our election, based on the applicable conversion rate. If we elect to deliver cash or a combination of cash and shares of our common stock, then the consideration due upon conversion will be based on an observation period consisting of 60 "VWAP trading days" (as defined in this prospectus supplement). The initial conversion rate is 94.7811 shares per $1,000 principal amount of notes,

	which represents an initial conversion price of approximately $10.55 per share, and is subject to adjustment as described in this prospectus supplement. If a "make-whole fundamental change" (as defined in this prospectus supplement) occurs, then we will in certain circumstances increase the conversion rate for a specified period of time. See "Description of Notes—Conversion Rights."
Redemption	The notes will be redeemable, in whole or in part, at our option at any time, and from time to time, on or after November 20, 2023 and, in the case of a partial redemption, on or before the 60th scheduled trading day before the maturity date, at a cash redemption price equal to the principal amount of the notes to be redeemed, plus accrued and unpaid interest, if any, to, but excluding, the redemption date, but only if the last reported sale price per share of our common stock exceeds 130% of the conversion price on (1) each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date we send the related redemption notice; and (2) the trading day immediately before the date we send such notice. In addition, calling any note for redemption will constitute a make-whole fundamental change with respect to that note, in which case the conversion rate applicable to the conversion of that note will be increased in certain circumstances if it is converted after it is called for redemption. See "Description of Notes—Optional Redemption."
Repurchase at the Option of the Noteholders after a Fundamental Change	If a "fundamental change" (as defined in this prospectus supplement) occurs, then, except as described in this prospectus supplement, noteholders may require us to repurchase their notes at a cash repurchase price equal to the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date. See "Description of Notes—Fundamental Change Permits Noteholders to Require Us to Repurchase Notes."
Trustee, Paying Agent and Conversion Agent	U.S. Bank National Association.
No Public Market	The notes are a new class of securities for which no public market currently exists. We do not intend to apply to list the notes on any securities exchange or for quotation on any inter-dealer quotation system. Accordingly, a liquid market for the notes may never

	develop. The underwriters have advised us that they intend to make a market in the notes. However, they are not obligated to do so and may discontinue any market-making activity at any time and without notice.
Nasdaq Global Select Market Symbol	Our common stock is listed on The Nasdaq Global Select Market under the symbol "CYTK." On November 7, 2019, the last reported sale price of our common stock was $8.275 per share.
Use of Proceeds	We estimate that the net proceeds to us from this offering will be approximately $115.9 million (or approximately $133.4 million if the underwriters fully exercise their over-allotment option), after deducting the underwriters' discounts and commissions and our estimated offering expenses. We intend to use the net proceeds from this offering to fund (i) the continued development of and commercial readiness activities associated with omecamtiv mecarbil, (ii) the continued clinical development of CK-274 and related compounds in indications associated with hypertrophic cardiomyopathies and related diseases associated with diastolic dysfunction and cardiac fibrosis, including heart failure with preserved ejection fraction, (iii) the continued clinical development of reldesemtiv in patients with ALS and SMA, including potential Phase 3 clinical trials and other commercial readiness activities, and (iv) working capital and other general corporate purposes, including tenant improvement of the new facility we plan to move into in 2021, capital expenditures, debt service or retirement of debt, including existing debt outstanding under the Term Loan. We intend to use approximately $11.6 million of the net proceeds from this offering to pay the cost of the capped call transaction described below. If the underwriters exercise their over-allotment option, we expect to use a portion of the net proceeds from the sale of the additional notes to enter into an additional capped call transaction with the capped call counterparty (as defined below).
Capped Call Transactions	In connection with the pricing of the notes, we entered to enter into a privately negotiated capped call transaction (together with any additional capped call transactions entered into in connection with the exercise by the underwriters of their over-allotment option as described below, the "capped call transactions") with one of the underwriters in this offering or its affiliate (the "capped call

counterparty"). If the underwriters exercise their over-allotment option, we expect to use a portion of the net proceeds from the sale of the additional notes to enter into an additional capped call transaction with the capped call counterparty.

The capped call transactions will cover, subject to customary adjustments, the number of shares of our common stock that will initially underlie the notes.

The capped call transactions are generally expected to reduce the potential dilution to our common stock and/or offset any cash payments we are required to make in excess of the principal amount of converted notes, as the case may be, as a result of any conversion of the notes, with such reduction and/or offset subject to a cap as described in "Description of Capped Call Transactions."

In connection with establishing its initial hedge of the capped call transactions, the capped call counterparty or its affiliates expect to purchase shares of our common stock and/or enter into various derivatives with respect to our common stock concurrently with or shortly after the pricing of the notes, including with certain investors in the notes. This activity could increase (or reduce the size of any decrease in) the market price of our common stock or the notes at that time.

In addition, the capped call counterparty or its affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions following the pricing of the notes and prior to the maturity of the notes (and are likely to do so on each exercise date of the capped call transaction, which are expected to occur during the 60 trading day period beginning on the 61st scheduled trading day prior to the maturity date of the notes, or following any termination of any portion of the capped call transaction in connection with any repurchase, redemption or early conversion of the notes). This activity could also cause or avoid an increase or decrease in the market price of our common stock or the notes, which could affect your ability to convert the notes and, to the extent the activity occurs during any observation period related to a conversion of the notes, affect the amount and value of the consideration that you will receive upon conversion of the notes.

	For a discussion of the potential impact of any market making or other activity by the capped call counterparty or its affiliates in connection with these capped call transactions, see "Underwriting—Capped Call Transactions" and "Risk Factors—Risks Related to the Notes and This Offering—The capped call transactions may affect the value of the notes and our common stock."
Risk Factors	Investing in the notes involves risks. See "Risk Factors."
Certain Material U.S. Federal Income Tax Considerations	For a description of certain material U.S. federal income tax consequences of purchasing, owning and disposing of the notes and shares of our common stock, if any, issuable upon the conversion of the notes, see "Certain Material U.S. Federal Income Tax Considerations."
Book-Entry Form	We will initially issue the notes in the form of one or more global notes registered in the name of Cede & Co., as nominee of The Depository Trust Company, or DTC, without interest coupons, which we will deposit with the trustee as custodian for DTC. Beneficial interests in global notes will be shown on, and transfers of global notes will be effected only through, the records maintained by DTC. Except in limited circumstances, we will not issue certificated notes. See "Description of Notes—Book Entry, Settlement and Clearance."

RISK FACTORS

Investing in our securities involves a high degree of risk. Before you decide to invest in our securities, you should carefully consider the risks and uncertainties described below together with all other information contained in this prospectus supplement, the accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering, and in our filings with the SEC that we have incorporated by reference in this prospectus supplement and the accompanying prospectus. If any of such risks actually occurs, our business, prospects, operating results and financial condition could suffer materially. In such event, the trading price of our common stock could decline and you might lose all or part of your investment. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business.

Risks Related to the Notes and This Offering

Our indebtedness and liabilities could limit the cash flow available for our operations, expose us to risks that could adversely affect our business, financial condition and results of operations and impair our ability to satisfy our obligations under the notes.

As of September 30, 2019, we had $45 million aggregate principal amount of indebtedness, all of which was senior secured indebtedness under the Term Loan. We will incur $120.0 million (or, if the underwriters fully exercise their overallotment option, $138.0 million) of additional indebtedness as a result of this offering. Subject to any restrictions contained in the Term Loan or any agreements governing our future indebtedness, we may also incur additional indebtedness to meet future financing needs. Our indebtedness could have significant negative consequences for our security holders and our business, results of operations and financial condition by, among other things:

- increasing our vulnerability to adverse economic and industry conditions;
- limiting our ability to obtain additional financing;
- requiring the dedication of a substantial portion of our cash flow from operations to service our indebtedness, which will reduce the amount of cash available for other purposes;
- limiting our flexibility to plan for, or react to, changes in our business;
- diluting the interests of our existing stockholders as a result of issuing shares of our common stock upon conversion of the notes; and
- placing us at a possible competitive disadvantage with competitors that are less leveraged than us or have better access to capital.

Our business may not generate sufficient funds, and we may otherwise be unable to maintain sufficient cash reserves, to pay amounts due under our indebtedness, including the notes, and our cash needs may increase in the future. In addition, any future indebtedness that we may incur may contain financial and other restrictive covenants that limit our ability to operate our business, raise capital or make payments under our other indebtedness. If we fail to comply with these covenants or to make payments under our indebtedness when due, then we would be in default under that indebtedness, which could, in turn, result in that and our other indebtedness becoming immediately payable in full.

We may be unable to raise the funds necessary to repurchase the notes for cash following a fundamental change, or to pay any cash amounts due upon conversion, and our future indebtedness may limit our ability to repurchase the notes or pay cash upon their conversion.

Noteholders may require us to repurchase their notes following a fundamental change at a cash repurchase price equal to the principal amount of the notes to be repurchased, plus accrued and unpaid interest to, but

excluding, the fundamental change repurchase date. See "Description of Notes—Fundamental Change Permits Noteholders to Require Us to Repurchase Notes" In addition, upon conversion, we will satisfy part or all of our conversion obligation in cash unless we elect to settle conversions solely in shares of our common stock.

We may not have enough available cash or be able to obtain financing at the time we are required to repurchase the notes or pay the cash amounts due upon conversion of the notes. In addition, applicable law, regulatory authorities and the agreements governing our existing and future indebtedness may restrict our ability to repurchase the notes or pay the cash amounts due upon conversion of the notes. Our failure to repurchase notes or to pay the cash amounts due upon conversion of the notes when required will constitute a default under the base and supplemental indentures that will govern the notes, which we refer to collectively as the "indenture." A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our other indebtedness, which may result in that other indebtedness becoming immediately payable in full. We may not have sufficient funds to satisfy all amounts due under the other indebtedness and the notes.

Not all dilutive events will result in an adjustment to the conversion rate.

We will adjust the conversion rate of the notes for certain events, including:

- certain stock dividends, splits and combinations;
- the issuance of certain rights, options or warrants to holders of our common stock;
- certain distributions of assets, debt securities, capital stock or other property to holders of our common stock;
- cash dividends on our common stock; and
- certain tender or exchange offers.

See "Description of Notes—Conversion Rights—Conversion Rate Adjustments." We are not required to adjust the conversion rate for other events, such as an issuance of common stock (or securities exercisable for, or convertible into, common stock) for cash, that may adversely affect the trading price of the notes and our common stock. An event may occur that adversely affects the noteholders and the trading price of the notes and the underlying shares of our common stock but that does not result in an adjustment to the conversion rate.

Redemption may adversely affect your return on the notes.

The notes will be redeemable, in whole or in part, at our option at any time, and from time to time, on a redemption date occurring on or after November 20, 2023 and, in the case of a partial redemption, on or before the 60th scheduled trading day before the maturity date, at a cash redemption price equal to the principal amount of the notes to be redeemed, plus accrued and unpaid, if any, but only if the last reported sale price per share of our common stock exceeds 130% of the conversion price on (1) each of at least 20 trading days, whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date we send the related redemption notice; and (2) the trading day immediately before the date we send such notice. As a result, we may choose to redeem some or all of the notes, including at times when prevailing interest rates are relatively low. As a result, you may not be able to reinvest the proceeds you receive from the redemption in a comparable security at an effective interest rate as high as the interest rate on your notes being redeemed. In addition, holders who convert in advance of any redemption would not get any compensation for the lost option value of their notes. See "Description of Notes—Optional Redemption."

Not all significant restructuring transactions will constitute a fundamental change, in which case you will not have the right to require us to repurchase your notes for cash.

If certain corporate events called "fundamental changes" occur, you will have the right to require us to repurchase your notes for cash. See "Description of Notes—Fundamental Change Permits Noteholders to

Require Us to Repurchase Notes." However, the definition of "fundamental change" is limited to specific corporate events and does not include all events that may adversely affect our financial condition or the trading price of the notes. For example, a leveraged recapitalization, refinancing, restructuring or acquisition by us may not constitute a fundamental change that would require us to repurchase the notes. Nonetheless, these events could significantly increase the amount of our indebtedness, harm our credit rating or adversely affect our capital structure and the trading price of the notes.

The increase to the conversion rate resulting from a make-whole fundamental change may not adequately compensate noteholders for the lost option value of their notes. In addition, a variety of transactions that do not constitute a make-whole fundamental change may significantly reduce the option value of the notes without a corresponding increase to the conversion rate.

If certain corporate events that constitute a "make-whole fundamental change" occur, then we will, in certain circumstances, temporarily increase the conversion rate. See "Description of Notes—Conversion Rights—Increase in Conversion Rate in Connection with a Make-Whole Fundamental Change." The amount of the increase to the conversion rate will depend on the date on which the make-whole fundamental change becomes effective and the applicable "stock price." While the increase to the conversion rate is designed to compensate noteholders for the lost option value of their notes resulting from a make-whole fundamental change, the increase is only an approximation and may not adequately compensate noteholders for the loss in option value. In addition, if the applicable "stock price" is greater than $150.00 per share or less than $8.275 per share (in each case, subject to adjustment), then we will not increase the conversion rate for the make-whole fundamental change. Moreover, we will not increase the conversion rate pursuant to these provisions to an amount that exceeds 120.8459 shares per $1,000 principal amount of notes, subject to adjustment.

Furthermore, the definition of make-whole fundamental change is limited to certain specific transactions. Accordingly, the make-whole fundamental change provisions of the indenture will not protect noteholders from other transactions that could significantly reduce the option value of the notes. For example, a spin-off or sale of a subsidiary or business division with volatile earnings, or a change in our line of business, could significantly affect the trading characteristics of our common stock and reduce the option value of the notes without constituting a make-whole fundamental change that results in a temporary increase to the conversion rate.

In addition, our obligation to increase the conversion rate in connection with a make-whole fundamental change could be considered a penalty, in which case its enforceability would be subject to general principles of reasonableness and equitable remedies.

There is currently no trading market for the notes. If an active trading market for the notes does not develop, then noteholders may be unable to resell their notes at desired times or prices, or at all.

The notes are a new class of securities for which no market currently exists. We do not intend to apply to list the notes on any securities exchange or for quotation on any inter-dealer quotation system. Although the underwriters have advised us that they intend to make a market in the notes, they not obligated to do so and may discontinue any market-making activity at any time and without notice. Accordingly, an active market for the notes may never develop, and, even if one develops, it may not be maintained. If an active trading market for the notes does not develop or is not maintained, then the market price and liquidity of the notes will be adversely affected and noteholders may not be able to resell their notes at desired times or prices, or at all.

The liquidity of the trading market, if any, and future trading prices of the notes will depend on many factors, including, among other things, the trading price of our common stock, prevailing interest rates, our dividend yield, financial condition, results of operations, business, prospects and credit quality relative to our competitors, the market for similar securities and the overall securities market. Many of these factors are beyond our control. Historically, the market for convertible debt has been volatile. Market volatility could significantly harm the market for the notes, regardless of our financial condition, results of operations, business, prospects or credit quality.

The notes will be effectively subordinated to our future secured indebtedness and structurally subordinated to the liabilities of our subsidiaries.

The notes will be our general unsecured obligations that will rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to the notes, equal in right of payment with all of our indebtedness that is not so subordinated and effectively rank junior to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness. In addition, because none of our subsidiaries will guarantee the notes, the notes will be structurally junior to all indebtedness and other liabilities of our subsidiaries (including trade payables, but excluding intercompany obligations and liabilities of a type not required to be reflected on a balance sheet of such subsidiaries in accordance with GAAP). The indenture will not prohibit us from incurring additional indebtedness, including secured indebtedness, which would be effectively senior to the notes to the extent of the value of the collateral securing that indebtedness, or indebtedness that would rank equal in right of payment with the notes. The indenture will also not prohibit our subsidiaries from incurring any additional indebtedness or other liabilities that would be structurally senior to our obligations under the notes.

In the event of our bankruptcy, liquidation, reorganization or other winding up, our assets that secure any indebtedness will not be available to make payments under the notes unless all of that indebtedness is first paid in full. We advise you that there may not be sufficient assets remaining to pay amounts due on any or all the notes then outstanding. In the event of the bankruptcy, liquidation, reorganization or other winding up of any of our subsidiaries, we, as a common equity holder of that subsidiary, and, therefore, the noteholders, will rank behind that subsidiary's creditors, including that subsidiary's trade creditors, and (to the extent we are not a holder thereof) that subsidiary's preferred equity holders, if any. Even if we were a creditor of any of our subsidiaries, our rights as a creditor would be effectively subordinated to any security interest of others in the assets of that subsidiary, to the extent of the value of those assets, and would be subordinated to any indebtedness of that subsidiary that is senior in right of payment to that held by us.

Our subsidiaries will have no obligations under the notes. The ability of our subsidiaries to pay dividends or make other payments to us may be restricted by, among other things, corporate and other laws and by agreements to which our subsidiaries may become a party. Accordingly, we may be unable to gain access to the cash flow or assets of our subsidiaries to enable us to make payments on the notes.

As of September 30, 2019, we had $45 million aggregate principal amount of indebtedness, all of which was senior secured indebtedness under the Term Loan. After giving effect to the issuance of the notes (assuming no exercise of the underwriters' over-allotment option), our total consolidated indebtedness for borrowed money would have been approximately $165 million in principal amount.

The trading price of our common stock and other factors could significantly affect the trading price of the notes.

We expect that the trading price of our common stock will significantly affect the trading price of the notes, which could result in greater volatility in the trading price of the notes than would be expected for non-convertible securities. The trading price of our common stock will likely continue to fluctuate in response to the factors described or referred to elsewhere in this section and under the caption "Disclosure Regarding Forward-Looking Statements," among others, many of which are beyond our control.

The issuance or sale of shares of our common stock, or rights to acquire shares of our common stock, could depress the trading price of our common stock and the notes.

We may conduct future offerings of our common stock, preferred stock or other securities that are convertible into or exercisable for our common stock to finance our operations or fund acquisitions, or for other purposes. In addition, as of September 30, 2019, we had reserved 7,786,764 shares of common stock for issuance

upon the exercise of outstanding options, 165,424 shares of common stock for issuance upon the exercise of outstanding warrants, 866,625 shares of common stock reserved for the vesting of outstanding restricted and performance stock units and 4,534,814 shares of common stock for future issuance under our stock option plans and employee stock purchase plans. The indenture for the notes will not restrict our ability to issue additional equity securities in the future. If we issue additional shares of our common stock or rights to acquire shares of our common stock, if any of our existing stockholders sells a substantial amount of our common stock, or if the market perceives that such issuances or sales may occur, then the trading price of our common stock, and, accordingly, the notes may significantly decrease. In addition, our issuance of additional shares of common stock will dilute the ownership interests of our existing common stockholders, including noteholders who have received shares of our common stock upon conversion of their notes.

We will make only very limited covenants in the indenture, and these limited covenants may not protect your investment.

Many debt instruments contain provisions that are designed to restrict the borrower's activities and operations in a manner that is designed to preserve the borrower's ability to make payments on the related indebtedness when due. These provisions include financial and operating covenants, and restrictions on the payments of dividends, the incurrence of indebtedness or the issuance or repurchase of securities by the borrower or any of its subsidiaries. The indenture for the notes will not contain any of these covenants or restrictions or otherwise place any meaningful restrictions on our ability to operate our business as management deems appropriate. As a result, your investment in the notes may not be as protected as an investment in an instrument that contains some or all of these types of covenants and restrictions.

Recent and future regulatory actions and other events may adversely affect the trading price and liquidity of the notes.

We expect that many investors in the notes, including potential purchasers of the notes from investors in this offering, will seek to employ a convertible note arbitrage strategy. Under this strategy, investors typically short sell a certain number of shares of our common stock and adjust their short position over time while they continue to hold the notes. Investors may also implement this type of strategy by entering into swaps on our common stock in lieu of, or in addition to, short selling shares of our common stock.

The SEC and other regulatory authorities have implemented various rules and taken certain actions, and may in the future adopt additional rules and take other actions, that may impact those engaging in short selling activity involving equity securities (including our common stock). These rules and actions include Rule 201 of SEC Regulation SHO, the adoption by the Financial Industry Regulatory Authority, Inc., and the national securities exchanges of a "limit up-limit down" program, the imposition of market-wide circuit breakers that halt trading of securities for certain periods following specific market declines, and the implementation of certain regulatory reforms required by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. Any governmental or regulatory action that restricts investors' ability to effect short sales of our common stock or enter into equity swaps on our common stock could depress the trading price of, and the liquidity of the market for, the notes.

In addition, the liquidity of the market for our common stock may decline, which could reduce the number of shares available for lending in connection with short sale transactions and the number of counterparties willing to enter into an equity swap on our common stock with a note investor. If investors and potential purchasers seeking to employ a convertible note arbitrage strategy are unable to borrow or enter into equity swaps on our common stock on commercially reasonable terms, then the trading price of, and the liquidity of the market for, the notes may significantly decline.

You may be subject to tax if we make or fail to make certain adjustments to the conversion rate of the notes even though you do not receive a corresponding cash distribution.

The conversion rate of the notes is subject to adjustment in certain circumstances, including the payment of cash dividends. If the conversion rate is adjusted as a result of a distribution that is taxable to our common stockholders, such as a cash dividend, you will be deemed to have received a distribution, which may be treated as a dividend subject to U.S. federal income tax, without the receipt of any cash. In addition, a failure to adjust (or to adjust adequately) the conversion rate after an event that increases your proportionate interest in us could be treated as a deemed taxable dividend to you. If a make-whole fundamental change occurs prior to the maturity date, under some circumstances, we will increase the conversion rate for notes converted in connection with the make-whole fundamental change. Such increase also may be treated as a distribution subject to U.S. federal income tax as a dividend. See "Certain Material U.S. Federal Income Tax Considerations." It is unclear whether any such deemed dividend would be eligible for the preferential tax treatment generally available for dividends paid by U.S. corporations to certain non-corporate U.S. holders (as defined under "Certain Material U.S. Federal Income Tax Considerations"). If you are a non-U.S. holder (as defined under "Certain Material U.S. Federal Income Tax Considerations"), any deemed dividend generally will be subject to U.S. federal withholding tax at a 30% rate, or such lower rate as may be specified by an applicable treaty, which may be set off against subsequent payments on the notes or any shares of our common stock owned by you or from any proceeds of any subsequent sale, exchange or other disposition of the notes (including the retirement of a note) or such common stock or other funds or assets of yours. The Internal Revenue Service has proposed regulations addressing the amount and timing of deemed distributions, obligations of withholding agents and filing and notice obligations of issuers, which if adopted could affect the U.S. federal income tax treatment of beneficial owners of notes deemed to receive such a distribution. See "Certain Material U.S. Federal Income Tax Considerations."

A rating agency may not rate the notes or may assign a rating that is lower than expected.

We do not intend to seek to have the notes rated by any rating agency. However, if one or more rating agencies rates the notes and assigns a rating that is lower than the rating that investors expect, or reduces their rating in the future, then the trading price of our common stock and the notes could significantly decline.

In addition, market perceptions of our creditworthiness will directly affect the trading price of the notes. Accordingly, if a ratings agency rates any of our indebtedness in the future or downgrades or withdraws the rating, or puts us on credit watch, then the trading price of the notes will likely decline.

Provisions in the indenture could delay or prevent an otherwise beneficial takeover of us.

Certain provisions in the notes and the indenture could make a third party attempt to acquire us more difficult or expensive. For example, if a takeover constitutes a fundamental change, then noteholders will have the right to require us to repurchase their notes for cash. In addition, if a takeover constitutes a make-whole fundamental change, then we may be required to temporarily increase the conversion rate. In either case, and in other cases, our obligations under the notes and the indenture could increase the cost of acquiring us or otherwise discourage a third party from acquiring us or removing incumbent management, including in a transaction that noteholders or holders of our common stock may view as favorable.

The capped call transactions may affect the value of the notes and our common stock.

In connection with the pricing of the notes, we entered into a capped call transaction with the capped call counterparty. If the underwriters exercise their over-allotment option, we expect to enter into an additional capped call transaction with the capped call counterparty. The capped call transactions cover, subject to customary adjustments, the number of shares of our common stock initially underlying the notes. The capped call transactions are generally expected to reduce the potential dilution as a result of conversion of the notes and/or offset any cash payments we are required to make in excess of the principal amount of converted notes, as the case may be, with such reduction and/or offset subject to a cap as described under "Description of Capped Call Transactions."

In connection with establishing its initial hedge of the capped call transactions, the capped call counterparty or its affiliates expect to purchase shares of our common stock and/or enter into various derivatives with respect to our common stock concurrently with or shortly after the pricing of the notes, including with certain investors in the notes. This activity could increase (or reduce the size of any decrease in) the market price of our common stock or the notes at that time.

In addition, the capped call counterparty or its affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions following the pricing of the notes and prior to the maturity of the notes (and are likely to do so on each exercise date of the capped call transactions, which are expected to occur during the 60 trading day period beginning on the 61st scheduled trading day prior to the maturity date of the notes, or following any termination of any portion of the capped call transaction in connection with any repurchase, redemption or early conversion of the notes). This activity could also cause or avoid an increase or a decrease in the market price of our common stock or the notes, which could affect your ability to convert the notes and, to the extent the activity occurs during any observation period related to a conversion of notes, it could affect the amount and value of the consideration that you will receive upon conversion of the notes.

In addition, if any such capped call transaction fails to become effective, whether or not this offering of notes is completed, the capped call counterparty or its affiliates may unwind their hedge positions with respect to our common stock, which could adversely affect the value of our common stock and, if the notes have been issued, the value of the notes.

We are subject to counterparty risk with respect to the capped call transactions.

The capped call counterparty to the capped call transactions is a financial institution, and we will be subject to the risk that the capped call counterparty may default or otherwise fail to perform, or may exercise certain rights to terminate, its obligations under the capped call transactions. Our exposure to the credit risk of the capped call counterparty will not be secured by any collateral. If the capped call counterparty becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at the time under such transaction. Our exposure will depend on many factors but, generally, our exposure will increase if the market price or the volatility of our common stock increases. In addition, upon a default or other failure to perform, or a termination of obligations, by the capped call counterparty, we may suffer adverse tax consequences and more dilution than we currently anticipate with respect to our common stock. We can provide no assurances as to the financial stability or viability of the capped call counterparty.

You may be unable to convert your notes before July 15, 2026, and the trading price of the notes could be less than the value of the consideration into which they could otherwise be converted.

Before July 15, 2026, you may convert your notes only if specific conditions are met. If these conditions are not met, then you will not be able to convert your notes and receive the cash, shares of our common stock or combination of cash and shares, as applicable, into which the notes would otherwise be convertible. As a result, the notes may trade at prices that are less than the value of the consideration into which they would otherwise be convertible.

Fluctuations in the trading price of our common stock after you elect to convert your notes may cause you to receive less valuable consideration than expected.

We will generally have the right to settle conversions in cash, shares of our common stock or a combination of cash and shares. If we elect to settle conversions solely in cash or in a combination of cash and shares, then the consideration due upon conversion will be determined based on the volume-weighted average price of our

common stock during the related "observation period," which is defined under the caption "Description of Notes—Definitions" and will consist of 60 "VWAP trading days." Except in certain circumstances, the observation period will begin after the related conversion date. Accordingly, a considerable amount of time may lapse between the time you elect to convert your notes and the time you receive the consideration due upon conversion, and if the trading price of our common stock declines during this time, then you may receive less consideration, or consideration that is less valuable, than expected.

Our management may spend the proceeds of this offering in ways with which you may disagree or that may not be profitable.

We intend to use a portion of the net proceeds from this offering, if completed, to pay the cost of the capped call transactions and to fund (i) the continued development of and commercial readiness activities associated with omecamtiv mecarbil, (ii) the continued clinical development of CK-274 and related compounds in indications associated with hypertrophic cardiomyopathies and related diseases associated with diastolic dysfunction and cardiac fibrosis, including heart failure with preserved ejection fraction, (iii) the continued clinical development of reldesemtiv in patients with ALS and SMA, including potential Phase 3 clinical trials and other commercial readiness activities, and (iv) working capital and other general corporate purposes, including tenant improvement of the new facility we plan to move into in 2021, capital expenditures, debt service or retirement of debt, including existing debt outstanding under the Term Loan. However, our management will have broad discretion to apply the net proceeds, and investors will rely on our management's judgment in spending the net proceeds. Our management may use the proceeds in ways that do not earn a profit or otherwise result in the creation of stockholder value. Pending application of the net proceeds as described above, we intend to invest the net proceeds in a variety of capital-preservation instruments, including direct or guaranteed obligations of the U.S. government, certificates of deposit and money market funds, in accordance with our investment policy.

The accounting method for the notes could adversely affect our reported financial condition and results.

The accounting method for reflecting the notes on our balance sheet, accruing interest expense for the notes and reflecting the underlying shares of our common stock in our reported diluted earnings per share may adversely affect our reported earnings and financial condition.

We expect that, under applicable accounting principles, the initial liability carrying amount of the notes will be the fair value of a similar debt instrument that does not have a conversion feature, valued using our cost of capital for straight, unconvertible debt. We expect to reflect the difference between the net proceeds from this offering and the initial carrying amount as a debt discount for accounting purposes, which will be amortized into interest expense over the term of the notes. As a result of this amortization, the interest expense that we expect to recognize for the notes for accounting purposes will be greater than the cash interest payments we will pay on the notes, which will result in lower reported net income. The lower reported income resulting from this accounting treatment could depress the trading price of our common stock and the notes.

In addition, under certain circumstances we may be eligible to use the treasury stock method to reflect the shares underlying the notes in our diluted earnings per share. Under this method, if the conversion value of the notes exceeds their principal amount for a reporting period, then we will calculate our diluted earnings per share assuming that all the notes were converted and that we issued shares of our common stock to settle the excess. However, if reflecting the notes in diluted earnings per share in this manner is anti- dilutive, or if the conversion value of the notes does not exceed their principal amount for a reporting period, then the shares underlying the notes will not be reflected in our diluted earnings per share. In addition, if accounting standards change in the future and we are not permitted to use the treasury stock method, then our diluted earnings per share may decline. For example, in July 2019, the Financial Accounting Standards Board published an exposure draft proposing to amend these accounting standards to eliminate the treasury stock method for convertible instruments and instead require application of the "if-converted" method. Under that method, if it is adopted, diluted earnings per share

would generally be calculated assuming that all the notes were converted solely into shares of common stock at the beginning of the reporting period, unless the result would be anti-dilutive. The application of the if-converted method may reduce our reported diluted earnings per share.

Furthermore, if any of the conditions to the convertibility of the notes is satisfied, then we may be required under applicable accounting standards to reclassify the liability carrying value of the notes as a current, rather than a long-term, liability. This reclassification could be required even if no noteholders convert their notes and could materially reduce our reported working capital.

Because the notes will initially be held in book-entry form, noteholders must rely on DTC's procedures to receive communications relating to the notes and exercise their rights and remedies.

We will initially issue the notes in the form of one or more "global notes" registered in the name of Cede & Co., as nominee of DTC. Beneficial interests in global notes will be shown on, and transfers of global notes will be effected only through, the records maintained by DTC. Except in limited circumstances, we will not issue certificated notes. See "Description of Notes—Book Entry, Settlement and Clearance." Accordingly, if you own a beneficial interest in a global note, then you will not be considered an owner or holder of the notes. Instead, DTC or its nominee will be the sole holder of the notes. Payments of principal, interest and other amounts on global notes will be made to the paying agent, who will remit the payments to DTC. We expect that DTC will then credit those payments to the DTC participant accounts that hold book-entry interests in the global notes and that those participants will credit the payments to indirect DTC participants. Unlike persons who have certificated notes registered in their names, owners of beneficial interests in global notes will not have the direct right to act on our solicitations for consents or requests for waivers or other actions from noteholders. Instead, those beneficial owners will be permitted to act only to the extent that they have received appropriate proxies to do so from DTC or, if applicable, a DTC participant. The applicable procedures for the granting of these proxies may not be sufficient to enable owners of beneficial interests in global notes to vote on any requested actions on a timely basis. In addition, notices and other communications relating to the notes (including any notice of redemption) will be sent to DTC. We expect DTC will forward any such communications to DTC participants, which in turn would forward such communications to indirect DTC participants, but we can make no assurances that you will timely receive any such communications.

Holding notes will not, in itself, confer any rights with respect to our common stock.

Noteholders will generally not be entitled to any rights with respect to our common stock (including voting rights and rights to receive any dividends or other distributions on our common stock). However, noteholders will be subject to all changes affecting our common stock to the extent the trading price of the notes depends on the market price of our common stock and to the extent they receive shares of our common stock upon conversion of their notes. For example, if we propose an amendment to our charter documents that requires stockholder approval, then a noteholder will not, as such, be entitled to vote on the amendment, although the noteholder will be subject to any changes implemented by that amendment in the powers, preferences or special rights of our common stock.

Risks Related to Our Business

We have a history of significant losses and may not achieve or sustain profitability and, as a result, you may lose part or all of your investment.

We have generally incurred operating losses in each year since our inception in 1997, due to costs incurred in connection with our research and development activities and general and administrative costs associated with our operations. Our drug candidates are all in early through late-stage clinical testing, and we and our partners must conduct significant additional clinical trials before we and our partners can seek the regulatory approvals necessary to begin commercial sales of our drugs. We expect to incur increasing losses for at least several more

years, as we continue our research activities and conduct development of, and seek regulatory approvals for, our drug candidates, and commercialize any approved drugs. If our drug candidates fail or do not gain regulatory approval, or if our drugs do not achieve market acceptance, we will not be profitable. If we fail to become and remain profitable, or if we are unable to fund our continuing losses, you could lose part or all of your investment.

We will need substantial additional capital in the future to sufficiently fund our operations.

We have consumed substantial amounts of capital to date, and our operating expenditures will increase over the next several years if we expand our research and development activities. We have funded our operations and capital expenditures with proceeds primarily from private and public sales of our equity securities, a royalty monetization agreement, strategic alliances, long-term debt, other financings, interest on investments and grants. We believe that our existing cash and cash equivalents, short-term investments and interest earned on investments should be sufficient to meet our projected operating requirements for at least the next 12 months. We have based this estimate on assumptions that may prove to be wrong, and we could utilize our available capital resources sooner than we currently expect. Because of the numerous risks and uncertainties associated with the development of our drug candidates and other research and development activities, including risks and uncertainties that could impact the rate of progress of our development activities, we are unable to estimate with certainty the amounts of capital outlays and operating expenditures associated with these activities.

For the foreseeable future, our operations will require significant additional funding, in large part due to our research and development expenses and the absence of any revenues from product sales. For example, we will require significant additional funding to enable us to conduct further development of our product candidates. Until we can generate a sufficient amount of product revenue, we expect to raise future capital through strategic alliance and licensing arrangements, public or private equity offerings and debt financings. We do not currently have any commitments for future funding other than reimbursements, milestone and royalty payments that we may receive under our collaboration agreements with Amgen and Astellas. We may not receive any further funds under those agreements. Our ability to raise funds may be adversely impacted by current economic conditions. As a result of these and other factors, we do not know whether additional financing will be available when needed, or that, if available, such financing would be on terms favorable to our stockholders or us.

To the extent that we raise additional funds through strategic alliances or licensing or other arrangements with third parties, we will likely have to relinquish valuable rights to our technologies, research programs or drug candidates, or grant licenses on terms that may not be favorable to us. To the extent that we raise additional funds by issuing equity securities, our stockholders will experience additional dilution and our share price may decline. To the extent that we raise additional funds through debt financing, the financing may involve covenants that restrict our business activities. In addition, funding from any of these sources, if needed, may not be available to us on favorable terms, or at all, or in accordance with our planned timelines.

If we cannot raise the funds we need to operate our business, we will need to delay or discontinue certain research and development activities, and our stock price may be negatively affected.

We are obligated to develop and maintain proper and effective internal control over financial reporting. In February 2019, our management identified a material weakness in our internal control over financial reporting. If we are unable to remediate the material weakness or other control deficiencies are identified, we may not be able to report our financial results accurately, prevent fraud or file our periodic reports in a timely manner, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We are required, pursuant to Section 404 of the Sarbanes-Oxley Act, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting.

Complying with Section 404 requires a rigorous compliance program as well as adequate time and resources. We may not be able to complete our internal control evaluation, testing and any required remediation

in a timely fashion. Additionally, if we identify one or more material weaknesses in our internal control over financial reporting, we will not be able to assert that our internal controls are effective. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. On February 27, 2019, our management concluded that our internal controls over financial reporting were ineffective as of December 31, 2018 due to the identification of a material weakness. As of December 31, 2018, we identified a material weakness related to the ineffective review and verification of internally prepared reports and analyses utilized in our financial statement closing process. The material weakness related to employee turnover resulting in a temporary lack of resources in financial reporting roles with the appropriate skills to perform effective review during our financial statement close process. This material weakness did not result in the restatement of prior quarterly or annually filed financial statements. To remediate the material weakness described above, we have filled certain positions within the accounting department and will, as necessary, supplement any further staffing needs with temporary resources. We will also continue to evaluate and improve our internal controls, processes and procedures in the financial statement close process.

We also previously concluded that our internal controls over financial reporting were not effective as of September 30, 2016, because a material weakness existed in our internal control over financial reporting related to research and development expenses associated with the review of clinical trial expenses incurred under our clinical research organization trial agreements, including in part, our review of information received from third-party service providers that is used in the operation of this control. We remediated this material weakness as of December 31, 2016.

We cannot be certain that these measures will successfully remediate the material weakness identified in connection with the audit of our financial statements for the year ended December 31, 2018 and that other material weaknesses and control deficiencies will not be discovered in the future. If our efforts are not successful or other material weaknesses are identified in the future or we are not able to comply with the requirements of Section 404 in a timely manner, our reported financial results could be materially misstated, we would receive an adverse opinion regarding our internal controls over financial reporting from our independent registered public accounting firm, and we could be subject to investigations or sanctions by regulatory authorities, which would require additional financial and management resources, and the value of our common stock could decline. In addition, because we concluded that our internal controls over financial reporting were not effective as of December 31, 2018 and as of September 30, 2016, and to the extent we identify future weaknesses or deficiencies, there could be material misstatements in our consolidated financial statements and we could fail to meet our financial reporting obligations. As a result, our ability to obtain additional financing, or obtain additional financing on favorable terms, could be materially and adversely affected which, in turn, could materially and adversely affect our business, our financial condition and the value of our common stock. If we are unable to assert that our internal control over financial reporting is effective in the future, or if our independent registered public accounting firm is unable to express an opinion or expresses an adverse opinion on the effectiveness of our internal controls in the future, investor confidence in the accuracy and completeness of our financial reports could be further eroded, which would have a material adverse effect on the price of our common stock.

Covenants in the loan agreement governing the Term Loan restrict our business and operations in many ways and if we do not effectively manage our covenants, our financial conditions and results of operations could be adversely affected. Our operations may not provide sufficient cash to meet the repayment obligations of our debt incurred under such loan agreement.

The loan agreement governing the Term Loan requires that we comply with certain covenants applicable to us, including among other things, covenants restricting dispositions, changes in business, management, ownership or business locations, mergers or acquisitions, indebtedness, encumbrances, distributions, investments, transactions with affiliates and subordinated debt, any of which could restrict our business and operations,

particularly our ability to respond to changes in our business or to take specified actions to take advantage of certain business opportunities that may be presented to us. Our failure to comply with any of the covenants could result in a default under the Term Loan, which could permit the lenders to declare all or part of any outstanding borrowings to be immediately due and payable.

If we are unable to repay those amounts, the Term Loan lenders could proceed against the collateral granted to them to secure that debt, which would seriously harm our business. In addition, should we be unable to comply with these covenants or if we default on any portion of our outstanding borrowings, the lenders can also impose a 5.0% penalty. In addition, the Term Loan has interest-only payments through December 31, 2020. The interest-only period may be extended upon the achievement of certain development milestones. If we do not achieve some or all of these development milestones, our liquidity and cash position may be harmed.

We have never generated, and may never generate, revenues from commercial sales of our drugs and we will not have drugs to market for at least several years, if ever.

We currently have no drugs for sale and we cannot guarantee that we will ever develop or obtain approval to market any drugs. To receive marketing approval for any drug candidate, we must demonstrate that the drug candidate satisfies rigorous standards of safety and efficacy to the FDA in the United States and other regulatory authorities abroad. We and our partners will need to conduct significant additional research and preclinical and clinical testing before we or our partners can file applications with the FDA or other regulatory authorities for approval of any of our drug candidates. In addition, to compete effectively, our drugs must be easy to use, cost-effective, covered by insurance or government sponsored medical plans, and economical to manufacture on a commercial scale, compared to other therapies available for the treatment of the same conditions. We may not achieve any of these objectives. Currently, our drug candidates in clinical development include omecamtiv mecarbil for the potential treatment of heart failure and reldesemtiv for the potential treatment of SMA, ALS and potentially other neuromuscular and non-neuromuscular indications associated with muscle weakness. We cannot be certain that the clinical development of our current or any future drug candidates will be successful, that they will receive the regulatory approvals required to commercialize them, that they will ultimately be accepted by prescribers or reimbursed by insurers or that any of our other research programs will yield a drug candidate suitable for clinical testing or commercialization. Our commercial revenues, if any, will be derived from sales of drugs that we do not expect to be commercially marketed for at least several years, if at all. The development of any one or all of these drug candidates may be discontinued at any stage of our clinical trials programs and we may not generate revenue from any of these drug candidates.

Clinical trials may fail to demonstrate the desired safety and efficacy of our drug candidates, which could prevent or significantly delay completion of clinical development and regulatory approval.

Prior to receiving approval to commercialize any of our drug candidates, we or our partners must adequately demonstrate to the satisfaction of FDA and foreign regulatory authorities that the drug candidate is sufficiently safe and effective with substantial evidence from well-controlled clinical trials. We or our partners will need to demonstrate efficacy in clinical trials for the treatment of specific indications and monitor safety throughout the clinical development process and following approval. None of our drug candidates have yet met the safety and efficacy standards required for regulatory approval for commercialization and they may never do so. In addition, for each of our preclinical compounds, we or our partners must adequately demonstrate satisfactory chemistry, formulation, quality, stability and toxicity in order to submit an IND to the FDA, or an equivalent application in foreign jurisdictions, that would allow us to advance that compound into clinical trials. Furthermore, we or our partners may need to submit separate INDs (or foreign equivalent) to different divisions within the FDA (or foreign regulatory authorities) in order to pursue clinical trials in different therapeutic areas. Each new IND (or foreign equivalent) must be reviewed by the new regulatory division before the clinical trial under its jurisdiction can proceed, entailing all the risks of delay inherent to regulatory review. If our or our partners' current or future preclinical studies or clinical trials are unsuccessful, our business will be significantly harmed and our stock price could be negatively affected.

All of our drug candidates are prone to the risks of failure inherent in drug development. Preclinical studies may not yield results that would adequately support the filing of an IND (or a foreign equivalent) with respect to our potential drug candidates. Even if the results of preclinical studies for a drug candidate are sufficient to support such a filing, the results of preclinical studies do not necessarily predict the results of clinical trials. As an example, because the physiology of animal species used in preclinical studies may vary substantially from other animal species and from humans, it may be difficult to assess with certainty whether a finding from a study in a particular animal species will result in similar findings in other animal species or in humans. For any of our drug candidates, the results from Phase 1 clinical trials in healthy volunteers and clinical results from Phase 1 and 2 trials in patients are not necessarily indicative of the results of later and larger clinical trials that are necessary to establish whether the drug candidate is safe and effective for the applicable indication. Likewise, interim results from a clinical trial may not be indicative of the final results from that trial, and results from early Phase 2 clinical trials may not be indicative of the results from later clinical trials. For example, early Phase 2 clinical trials of tirasemtiv in patients with ALS showed encouraging dose-related trends in measurements of the ALSFRS-R, a clinically validated instrument designed to measure disease progression and changes in functional status, for patients receiving tirasemtiv compared to those receiving placebo. However, BENEFIT-ALS, a Phase 2b clinical trial of tirasemtiv in patients with ALS, did not achieve its primary efficacy endpoint, the mean change from baseline in the ALSFRS-R for patients receiving tirasemtiv compared to those receiving placebo, and in November 2017, we announced that VITALITY-ALS did not achieve its primary endpoint or secondary endpoints. Following the results of VITALITY-ALS, we suspended development of tirasemtiv.

Moreover, the Phase 2 clinical trial of reldesemtiv in COPD and Phase 1b clinical trial of reldesemtiv in elderly subjects with limited mobility did not show efficacy, and there can be no assurance that reldesemtiv will demonstrate efficacy in other indications, regardless of the phase of development.

In addition, while the clinical trials of our drug candidates are designed based on the available relevant information, such information may not accurately predict what actually occurs during the course of the trial itself, which may have consequences for the conduct of an ongoing clinical trial or for the eventual results of that trial. For example, the number of patients planned to be enrolled in a placebo-controlled clinical trial is determined in part by estimates relating to expected treatment effect and variability about the primary endpoint. These estimates are based upon earlier non-clinical and clinical studies of the drug candidate itself and clinical trials of other drugs thought to have similar effects in a similar patient population. If information gained during the conduct of the trial shows these estimates to be inaccurate, we may elect to adjust the enrollment accordingly, which may cause delays in completing the trial, additional expense or a statistical penalty to apply to the evaluation of the trial results.

Furthermore, in view of the uncertainties inherent in drug development, such clinical trials may not be designed with focus on indications, patient populations, dosing regimens, endpoints, safety, efficacy or pharmacokinetic parameters or other variables that will provide the necessary safety or efficacy data to support regulatory approval to commercialize the resulting drugs. For example, we believe that effects on respiratory function, including SVC, may be appropriate as a clinical endpoint for reldesemtiv; however, regulatory authorities may not accept these effects as a clinical endpoint to support registration of reldesemtiv for the treatment of ALS. Clinical trials of our drug candidates are designed based on guidance or advice from regulatory agencies, which is subject to change during the development of the drug candidate at any time. Such a change in a regulatory agency's guidance or advice may cause that agency to deem results from trials to be insufficient to support approval of the drug candidate and require further clinical trials of that drug candidate to be conducted. In addition, individual patient responses to the dose administered of a drug may vary in a manner that is difficult to predict. Also, the methods we select to assess particular safety, efficacy or pharmacokinetic parameters may not yield the same statistical precision in estimating our drug candidates' effects as may other methodologies. Even if we believe the data collected from clinical trials of our drug candidates are promising, these data may not be sufficient to support approval by the FDA or foreign regulatory authorities. Non-clinical and clinical data can be interpreted in different ways. Accordingly, the FDA or foreign regulatory authorities

could interpret these data in different ways from us or our partners, which could delay, limit or prevent regulatory approval.

Furthermore, while planned interim analyses in clinical trials can enable early terminations for futility or for overwhelming efficacy, the timing, which can be based on accrual of events, enrollment or other factors, and the results of such analyses, is unpredictable. For example, in GALACTIC-HF, a Phase 3 clinical trial of omecamtiv mecarbil, a second interim analysis for superiority and futility is planned to be conducted in the first half of 2020, but the exact timing and outcome of such interim analysis are uncertain. Our GALACTIC-HF trial is being conducted under an SPA agreement with FDA. However, even where the FDA agrees to the design, execution and analysis proposed in protocols reviewed under the SPA process, the FDA may revoke or alter its agreement in certain circumstances, and the FDA retains significant latitude and discretion in interpreting the terms of the SPA agreement and the data and results from any study that is subject to the SPA agreement. There, is no guarantee that either the trial will be successful, or even if successful, that FDA would approve any resulting NDA.

Administering any of our drug candidates or potential drug candidates may produce undesirable side effects, also known as adverse events. Toxicities and adverse events observed in preclinical studies for some compounds in a particular research and development program may also occur in preclinical studies or clinical trials of other compounds from the same program. Potential toxicity issues may arise from the effects of the active pharmaceutical ingredient itself or from impurities or degradants that are present in the active pharmaceutical ingredient or could form over time in the formulated drug candidate or the active pharmaceutical ingredient. These toxicities or adverse events could delay or prevent the filing of an IND (or a foreign equivalent) with respect to our drug candidates or potential drug candidates or cause us, our partners or the FDA or foreign regulatory authorities to modify, suspend or terminate clinical trials with respect to any drug candidate at any time during the development program. Further, the administration of two or more drugs contemporaneously can lead to interactions between them, and our drug candidates may interact with other drugs that trial subjects are taking. If the adverse events are severe or frequent enough to outweigh the potential efficacy of a drug candidate, the FDA or other regulatory authorities could deny approval of that drug candidate for any or all targeted indications. Even if one or more of our drug candidates were approved for sale as drugs, the occurrence of even a limited number of adverse events or toxicities when used in large populations may cause the FDA or foreign regulatory authorities to impose restrictions on, or stop, the further marketing of those drugs. Indications of potential adverse events or toxicities which do not seem significant during the course of clinical trials may later turn out to actually constitute serious adverse events or toxicities when a drug is used in large populations or for extended periods of time.

We have observed certain adverse events in the clinical trials conducted with our drug candidates. For example, in clinical trials of omecamtiv mecarbil, adverse events of chest discomfort, palpitations, dizziness and feeling hot, increases in heart rate, declines in blood pressure, electrocardiographic changes consistent with acute myocardial ischemia and transient rises in the MB fraction of creatine kinase and cardiac troponins I and T, which are indicative of myocardial infarction were observed during treatment with omecamtiv mecarbil.

In addition, clinical trials of reldesemtiv and omecamtiv mecarbil enroll patients who typically suffer from serious diseases which put them at increased risk of death. These patients may die while receiving our drug candidates. In such circumstances, it may not be possible to exclude with certainty a causal relationship to our drug candidate, even though the responsible clinical investigator may view such an event as not study drug-related.

Any failure or significant delay in completing preclinical studies or clinical trials for our drug candidates, or in receiving and maintaining regulatory approval for the sale of any resulting drugs, may significantly harm our business and negatively affect our stock price.

The failure of a number of Phase 3 clinical trials evaluating other compounds as potential treatments for patients with ALS may suggest an increased risk that our clinical development program of reldesemtiv in patients with ALS will also fail.

In recent years, a number of Phase 3 clinical trials of potential treatments for ALS have failed to demonstrate the requisite efficacy for regulatory approval or for their continued development. These include our trial of tirasemtiv known as VITALITY-ALS, Biogen's trial of dexpramipexole, known as EMPOWER, the National Institute of Neurological Disorders and Stroke's trial of ceftriaxone, and Trophos SA's trial of olesoxime. Reldesemtiv, like these compounds, may fail in clinical development if it does not show a statistically significant level of clinical efficacy or if the adverse event profile is too great compared to its benefits. Further, even if we believe the data collected from the planned clinical development program of reldesemtiv are promising and should support approval, the FDA or other regulatory authorities may not deem these data to be sufficient to support approval.

Clinical trials are expensive, time-consuming and subject to delay.

Clinical trials are subject to rigorous regulatory requirements and are very expensive, difficult and time-consuming to design and implement. The length of time and number of trial sites and patients required for clinical trials vary substantially based on the type, complexity, novelty, intended use of the drug candidate and safety concerns. Clinical trials of our current drug candidates can each continue for several more years. However, the clinical trials for all or any of our drug candidates may take significantly longer to complete. The commencement and completion of our or our partners' clinical trials could be delayed or prevented by many factors, including, but not limited to:

- delays in obtaining, or inability to obtain, regulatory or other approvals to commence and conduct clinical trials in the manner we or our partners deem necessary for the appropriate and timely development of our drug candidates and commercialization of any resulting drugs;
- delays in identifying and reaching agreement, or inability to identify and reach agreement, on acceptable terms, with prospective clinical trial sites and other entities involved in the conduct of our or our partners' clinical trials;
- delays or additional costs in developing, or inability to develop, appropriate formulations of our drug candidates for clinical trial use;
- slower than expected rates of patient recruitment and enrollment;
- for those drug candidates that are the subject of a strategic alliance, delays in reaching agreement with our partner as to appropriate development strategies;
- a regulatory authority may require changes to a protocol for a clinical trial that then may require approval from regulatory agencies in other jurisdictions where the trial is being conducted;
- an institutional review board, or IRB, or its foreign equivalent may require changes to a protocol that then require approval from regulatory agencies and other IRBs and their foreign equivalents, or regulatory authorities may require changes to a protocol that then require approval from the IRBs or their foreign equivalents;
- for clinical trials conducted in foreign countries, the time and resources required to identify, interpret and comply with foreign regulatory requirements or changes in those requirements, and political instability or natural disasters occurring in those countries;
- lack of effectiveness of our drug candidates during clinical trials;
- unforeseen safety issues;
- inadequate supply, or delays in the manufacture or supply, of clinical trial materials;
- uncertain dosing issues;

- failure by us, our partners, or clinical research organizations, investigators or site personnel engaged by us or our partners to comply with good clinical practices and other applicable laws and regulations, including those concerning informed consent;
- inability or unwillingness of investigators or their staffs to follow clinical protocols;
- failure by our clinical research organizations, clinical manufacturing organizations and other third parties supporting our or our partners' clinical trials to fulfill their obligations;
- inability to monitor patients adequately during or after treatment;
- introduction of new therapies or changes in standards of practice or regulatory guidance that render our drug candidates or their clinical trial endpoints obsolete; and
- results from non-clinical studies that may adversely impact the timing or further development of our drug candidates.

We do not know whether planned clinical trials will begin on time, or whether planned or currently ongoing clinical trials will need to be restructured or will be completed on schedule, if at all. Significant delays in clinical trials will impede our ability to commercialize our drug candidates and generate revenue and could significantly increase our development costs.

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

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

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the proximity of patients to study sites;
- the design of the trial;
- the ability to recruit clinical trial investigators with the appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies or clinical trials, including any new drugs that may be approved for the indications we are investigating or clinical trial results;
- the 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 and our partners' clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as our and our partners' product candidates, and this competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our or our partners' 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 or our partners' 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 in such clinical trial site.

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 and our partners' ability to advance the development of product candidates.

We depend on Amgen for the conduct and funding of the development and commercialization of omecamtiv mecarbil.

Under our strategic alliance, Amgen holds an exclusive worldwide license to our drug candidate omecamtiv mecarbil. As a result, Amgen is responsible for the development and obtaining and maintaining regulatory approval of omecamtiv mecarbil for the potential treatment of heart failure worldwide.

Amgen is conducting GALACTIC-HF, a Phase 3 clinical trial of omecamtiv mecarbil. We do not control the development activities being conducted or that may be conducted in the future by Amgen, including, but not limited to, the timing of initiation, termination or completion of clinical trials, the analysis of data arising out of those clinical trials or the timing of release of data concerning those clinical trials, which may impact our ability to report on Amgen's results. Amgen may conduct these activities more slowly or in a different manner than we would if we controlled the development of omecamtiv mecarbil. Amgen is responsible for submitting future applications to the FDA and other regulatory authorities for approval of omecamtiv mecarbil and will be the owner of marketing approvals issued by the FDA and other regulatory authorities for omecamtiv mecarbil, subject to Servier's exclusive rights for the commercialization of omecamtiv mecarbil in Europe, as well as the CIS, including Russia. If the FDA or other regulatory authorities approve omecamtiv mecarbil, Amgen will also be responsible for the marketing and sale of the resulting drug, subject to our right to co-promote omecamtiv mecarbil in North America in connection with the exercise of our option to co-fund Phase 3 development costs of omecamtiv mecarbil under the collaboration and subject to Servier's exclusive rights for the commercialization of omecamtiv mecarbil in Europe, as well as the CIS, including Russia. However, we cannot control whether Amgen will devote sufficient attention and resources to the development of omecamtiv mecarbil or will proceed in an expeditious manner, even with our exercise of our option and co-funding of the Phase 3 development program of omecamtiv mecarbil. Even if the FDA or other regulatory agencies approve omecamtiv mecarbil, Amgen or Servier may elect not to proceed with the commercialization of the resulting drug in one or more countries.

Disputes may arise between us and Amgen, which may delay or cause the termination of any clinical trials of omecamtiv mecarbil, result in significant litigation or cause Amgen to act in a manner that is not in our best interest. The costs associated with the continuing development of omecamtiv mecarbil may cause Amgen to reconsider the terms of its investment and seek to amend or terminate our collaboration agreement or to suspend the development of omecamtiv mecarbil. If development of omecamtiv mecarbil does not progress for these or any other reasons, we would not receive further milestone payments or royalties on product sales from Amgen with respect to omecamtiv mecarbil. If the results of one or more clinical trials with omecamtiv mecarbil do not meet Amgen's expectations at any time, Amgen may elect to terminate further development of omecamtiv mecarbil or certain of the potential clinical trials for omecamtiv mecarbil, even if the actual number of patients treated at that time is relatively small. In addition, Amgen generally has discretion to elect whether to pursue or abandon the development of omecamtiv mecarbil and may terminate our strategic alliance for any reason upon six months prior notice. With our consent, Amgen granted Servier an option to commercialize omecamtiv mecarbil in Europe and the CIS, including Russia, which Servier decided to exercise. In August 2016, we entered into a letter agreement with Amgen and Servier, which provides that if Amgen's rights to omecamtiv mecarbil are terminated with respect to the territory subject to Servier's sublicense, the sublicensed rights previously granted by Amgen to Servier with respect to omecamtiv mecarbil will remain in effect and become a direct license or sublicense of such rights by us to Servier, on substantially the same terms as those in the Option, License and Collaboration Agreement between Amgen and Servier. If Amgen abandons omecamtiv mecarbil, it would result in a delay in or could prevent us from commercializing omecamtiv mecarbil and would delay and could prevent us from obtaining revenues for this drug candidate. In addition, we would be required to provide Servier with a direct license or sublicense and the rights to commercialize omecamtiv mecarbil in Europe and the CIS, including Russia, on terms that were not negotiated by us. There can be no assurance that we would be able to negotiate and enter into a definitive agreement with Servier on terms favorable or acceptable to us, or at all.

If Amgen abandons development of omecamtiv mecarbil prior to regulatory approval or if it elects not to proceed with commercialization of the resulting drug following regulatory approval, we would have to seek a

new partner for development or commercialization, curtail or abandon that development or commercialization, or undertake and fund the development of omecamtiv mecarbil or commercialization of the resulting drug ourselves. If we seek a new partner but are unable to do so on acceptable terms, or at all, or do not have sufficient funds to conduct the development or commercialization of omecamtiv mecarbil ourselves, we would have to curtail or abandon that development or commercialization, which could harm our business.

We depend on Astellas for the conduct and funding of the development and commercialization of reldesemtiv.

The primary objective of our strategic alliance with Astellas is to advance skeletal muscle activators including reldesemtiv as novel therapies for indications associated with muscle weakness.

Astellas has an exclusive license to co-develop and commercialize reldesemtiv for potential application in certain neuromuscular and non-neuromuscular indications worldwide, subject to certain Cytokinetics' development and commercialization rights. Under this strategic alliance, we have conducted Phase 2 clinical trials of reldesemtiv in patients with SMA and ALS and Astellas has conducted a Phase 2 clinical trial of reldesemtiv in patients with COPD and a Phase 1b clinical trial of reldesemtiv in elderly subjects with limited mobility.

Astellas is currently primarily responsible for the development of reldesemtiv. We do not control the development activities that may be conducted by Astellas, including, but not limited to, the timing of initiation, termination or completion of clinical trials, the analysis of data arising out of those clinical trials or the timing of release of data concerning those clinical trials, which may impact our ability to report on Astellas' results. Astellas may conduct these activities more slowly or in a different manner than we would. In general, Astellas is responsible for submitting future applications to the FDA or other regulatory authorities for approval of reldesemtiv and will be the owner of any marketing approvals issued by the FDA or other regulatory authorities for reldesemtiv. If the FDA or other regulatory authorities approve reldesemtiv, Astellas will also be responsible for the marketing and sale of the resulting drug, subject to our right to co-promote the drug in the United States, Canada and, for neuromuscular indications, Europe. However, we cannot control whether Astellas will devote sufficient attention and resources to the development of reldesemtiv or will proceed in an expeditious manner. Even if the FDA or other regulatory agencies approve reldesemtiv, Astellas may elect not to proceed with the commercialization of the resulting drug in one or more countries.

If the results of one or more clinical trials with reldesemtiv, including the Phase 2 clinical trials of reldesemtiv in patients with ALS and SMA, do not meet Astellas' expectations at any time, Astellas may elect to terminate further development of reldesemtiv or certain of the potential clinical trials for reldesemtiv, even if the actual number of patients treated at that time is relatively small. In addition, Astellas generally has discretion to elect whether to pursue or abandon the development of reldesemtiv. Cytokinetics and Astellas have agreed in principle to revise the terms of the collaboration to provide that Cytokinetics will obtain exclusive control over the development and commercialization of FSTAs, including reldesemtiv and CK-601, which would lead to a reduction in the level of funding from Astellas and an associated increase in the share of commercial returns for Cytokinetics. Astellas may terminate our strategic alliance in whole or in part for any reason upon six months prior notice at any time following expiration of the strategic alliance's research term, which is currently set to expire on December 31, 2019 although we have an agreement in principle with Astellas to extend the research term through December 31, 2020. Disputes may arise between us and Astellas, which may delay or cause the termination of any clinical trials of reldesemtiv, result in significant litigation or cause Astellas to act in a manner that is not in our best interest. If development of reldesemtiv does not progress for these or any other reasons, we would not receive further milestone payments or royalties on product sales from Astellas with respect to reldesemtiv. If Astellas abandons development of reldesemtiv prior to regulatory approval or if it elects not to proceed with commercialization of the resulting drug following regulatory approval, we would have to seek a new partner for development or commercialization, curtail or abandon that development or commercialization, or undertake and fund the development of reldesemtiv or commercialization of the resulting drug ourselves. If we

seek a new partner but are unable to do so on acceptable terms, or at all, or do not have sufficient funds to conduct the development or commercialization of reldesemtiv ourselves, we would have to curtail or abandon that development or commercialization, which could harm our business.

If we do not enter into strategic alliances for our unpartnered drug candidates or research and development programs or fail to successfully maintain our current or future strategic alliances, we may have to reduce, delay or discontinue our advancement of our drug candidates and programs or expand our research and development capabilities and increase our expenditures.

Drug development is complicated and expensive. We currently have limited financial and operational resources to carry out drug development. Our strategy for developing, manufacturing and commercializing our drug candidates currently requires us to enter into and successfully maintain strategic alliances with pharmaceutical companies or other industry participants to advance our programs and reduce our expenditures on each program. Accordingly, the success of our development activities depends in large part on our current and future strategic partners' performance, over which we have little or no control.

Our ability to commercialize drugs that we develop with our partners and that generate royalties from product sales depends on our partners' abilities to assist us in establishing the safety and efficacy of our drug candidates, obtaining and maintaining regulatory approvals and achieving market acceptance of the drugs once commercialized. Our partners may elect to delay or terminate development of one or more drug candidates, independently develop drugs that could compete with ours or fail to commit sufficient resources to the marketing and distribution of drugs developed through their strategic alliances with us. Our partners may not proceed with the development and commercialization of our drug candidates with the same degree of urgency as we would because of other priorities they face. In addition, new business combinations or changes in a partner's business strategy may adversely affect its willingness or ability to carry out its obligations under a strategic alliance.

If we are not able to successfully maintain our existing strategic alliances or establish and successfully maintain additional strategic alliances, we will have to limit the size or scope of, or delay or discontinue, one or more of our drug development programs or research programs, or undertake and fund these programs ourselves. Alternatively, if we elect to continue to conduct any of these drug development programs or research programs on our own, we will need to expand our capability to conduct clinical development by bringing additional skills, technical expertise and resources into our organization. This would require significant additional funding, which may not be available to us on acceptable terms, or at all.

To the extent we elect to fund the development of a drug candidate, or the commercialization of a drug at our expense, we will need substantial additional funding.

The discovery, development and commercialization of new drugs is costly. As a result, to the extent we elect to fund the development of a drug candidate or the commercialization of a drug, we will need to raise additional capital to:

- fund clinical trials and seek regulatory approvals;
- expand our development capabilities;
- engage third-party manufacturers for such drug candidate or drug;
- build or access commercialization capabilities;
- implement additional internal systems and infrastructure;
- maintain, defend and expand the scope of our intellectual property; and
- hire and support additional management and scientific personnel.

Our future funding requirements will depend on many factors, including, but not limited to:

- the rate of progress and costs of our or our partners' clinical trials and other research and development activities;
- the costs and timing of seeking and obtaining regulatory approvals;
- the costs associated with establishing manufacturing and commercialization capabilities;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the costs of acquiring or investing in businesses, products and technologies;
- the effect of competing technological and market developments; and
- the status of, payment and other terms, and timing of any strategic alliance, licensing or other arrangements that we have entered into or may establish.

Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never do, we expect to continue to finance our future cash needs primarily through strategic alliances and other financings. We cannot be certain that additional funding will be available on acceptable terms, or at all. If we are not able to secure additional funding when needed, we may have to delay, reduce the scope of or eliminate one or more of our clinical trials or research and development programs or future commercialization initiatives.

We depend on contract research organizations, or CROs, to conduct our clinical trials and have limited control over their performance. If these CROs do not successfully carry out their contractual duties or meet expected deadlines, or if we lose any of our CROs, we may not be able to obtain regulatory approval for or commercialize our product candidates on a timely basis, if at all.

We have used and intend to continue to use a limited number of CROs within and outside of the United States to conduct clinical trials of our drug candidates and related activities. We do not have control over many aspects of our CROs' activities, and cannot fully control the amount, timing or quality of resources that they devote to our programs. CROs may not assign as high a priority to our programs or pursue them as diligently as we would if we were undertaking these programs ourselves. The activities conducted by our CROs therefore may not be completed on schedule or in a satisfactory manner. CROs may also give higher priority to relationships with our competitors and potential competitors than to their relationships with us. Outside of the United States, we are particularly dependent on our CROs' expertise in communicating with clinical trial sites and regulatory authorities and ensuring that our clinical trials and related activities and regulatory filings comply with applicable laws.

Our CROs' failure to carry out development activities on our behalf as agreed and in accordance with our and the FDA's or other regulatory agencies' requirements and applicable U.S. and foreign laws, or our failure to properly coordinate and manage these activities, could increase the cost of our operations and delay or prevent the development, approval and commercialization of our drug candidates. For example, in June 2013, we learned from our data management vendor for BENEFIT-ALS that a programming error in the electronic data capture system controlling study drug assignment caused 58 patients initially randomized to and treated with tirasemtiv to receive placebo instead at a certain trial visit and for the remainder of the trial. In order to maintain the originally intended statistical power of the trial, we amended the protocol to permit enrollment of approximately 680 patients, or 180 patients in addition to the 500 patients allowed under the existing protocol. This protocol amendment resulted in additional costs and delays in conducting BENEFIT-ALS. Further, for the quarter ended September 30, 2016, we determined that there was an error in the accounting for the recognition of clinical research and development expenses related to the information received from one of our CROs, which resulted in a restatement of our clinical research and development expenses, related clinical accrual accounts and related

financial disclosures as of and for the three and nine month periods ended September 30, 2016. In addition, if a CRO fails to perform as agreed, our ability to collect damages may be contractually limited. If we fail to effectively manage the CROs carrying out the development of our drug candidates or if our CROs fail to perform as agreed, the commercialization of our drug candidates will be delayed or prevented. In many cases, our CROs have the right to terminate their agreements with us in the event of an uncured material breach. Identifying, qualifying and managing performance of third-party service providers can be difficult, time consuming and cause delays in our development programs. In addition, there is a natural transition period when a new CRO commences work and the new CRO may not provide the same type or level of services as the original provider. If any of our relationships with our third-party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so timely or on commercially reasonable terms.

We have no manufacturing capacity and depend on our strategic partners and contract manufacturers to produce our clinical trial materials, including our drug candidates, and anticipate continued reliance on contract manufacturers for the development and commercialization of our potential drugs.

We do not currently operate manufacturing facilities for clinical or commercial production of our drug candidates. We have limited experience in drug formulation and manufacturing, and we lack the resources and the capabilities to manufacture any of our drug candidates on a clinical or commercial scale. Amgen has assumed responsibility to conduct these activities for the ongoing development of omecamtiv mecarbil worldwide. Astellas has primary responsibility for the manufacturing for the ongoing development of reldesemtiv worldwide. If any partner were to terminate the development of any existing drug candidate, we would need to rely on contract manufacturers for future supply. For example, Cytokinetics and Astellas have agreed in principle to revise the terms of our collaboration to provide that Cytokinetics will obtain exclusive control over the development and commercialization of FSTAs, including reldesemtiv. If we were to assume such control, we would need to effect a transfer of the manufacturing to one or more contract manufacturers and would thereafter be solely responsible for manufacturing other than certain in-kind support and other manufacturing by Astellas. We expect to rely on contract manufacturers to supply all future drug candidates for which we conduct development, as well as other materials required to conduct our clinical trials. If any of our existing or future contract manufacturers fail to perform satisfactorily, it could delay development or regulatory approval of our drug candidates or commercialization of our drugs, producing additional losses and depriving us of potential product revenues. In addition, if a contract manufacturer fails to perform as agreed, our ability to collect damages may be contractually limited.

Our drug candidates require precise high-quality manufacturing. The failure to achieve and maintain high manufacturing standards, including failure to detect or control anticipated or unanticipated manufacturing errors or the frequent occurrence of such errors, could result in patient injury or death, discontinuance or delay of ongoing or planned clinical trials, delays or failures in product testing or delivery, cost overruns, product recalls or withdrawals and other problems that could seriously hurt our business. Contract drug manufacturers often encounter difficulties involving production yields, quality control and quality assurance and shortages of qualified personnel. These manufacturers are subject to stringent regulatory requirements, including the FDA's current good manufacturing practices regulations and similar foreign laws and standards. Each contract manufacturer must pass a pre-approval inspection before we can obtain marketing approval for any of our drug candidates and following approval will be subject to ongoing periodic unannounced inspections by the FDA, the U.S. Drug Enforcement Agency and other regulatory agencies, to ensure strict compliance with current good manufacturing practices and other applicable government regulations and corresponding foreign laws and standards. We seek to ensure that our contract manufacturers comply fully with all applicable regulations, laws and standards. However, we do not have control over our contract manufacturers' compliance with these regulations, laws and standards. If one of our contract manufacturers fails to pass its pre-approval inspection or maintain ongoing compliance at any time, the production of our drug candidates could be interrupted, resulting in delays or discontinuance of our clinical trials, additional costs and potentially lost revenues. In addition, failure of any third-party manufacturers or us to comply with applicable regulations, including pre- or post-approval inspections and the current good manufacturing practice requirements of the FDA or other comparable regulatory

agencies, could result in sanctions being imposed on us. These sanctions could include fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval of our products, delay, suspension or withdrawal of approvals, license revocation, product seizures or recalls, operational restrictions and criminal prosecutions, any of which could significantly and adversely affect our business.

In addition, our existing and future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to successfully produce, store and distribute our drug candidates. If a natural disaster, business failure, strike or other difficulty occurs, we may be unable to replace these contract manufacturers in a timely or cost-effective manner and the production of our drug candidates would be interrupted, resulting in delays, loss of customers and additional costs.

Switching manufacturers or manufacturing sites would be difficult and time-consuming because the number of potential manufacturers is limited. In addition, before a drug from any replacement manufacturer or manufacturing site can be commercialized, the FDA and, in some cases, foreign regulatory agencies, must approve that site. These approvals would require regulatory testing and compliance inspections. A new manufacturer or manufacturing site also would have to be educated in, or develop substantially equivalent processes for, production of our drugs and drug candidates. It may be difficult or impossible to transfer certain elements of a manufacturing process to a new manufacturer or for us to find a replacement manufacturer on acceptable terms quickly, or at all, either of which would delay or prevent our ability to develop drug candidates and commercialize any resulting drugs.

We may not be able to successfully manufacture our drug candidates in sufficient quality and quantity, which would delay or prevent us from developing our drug candidates and commercializing resulting approved drugs, if any.

To date, our drug candidates have been manufactured in quantities adequate for preclinical studies and early through late-stage clinical trials. In order to conduct large scale clinical trials for a drug candidate and for commercialization of the resulting drug if that drug candidate is approved for sale, we will need to manufacture some drug candidates in larger quantities. We may not be able to successfully repeat or increase the manufacturing capacity for any of our drug candidates, whether in collaboration with third-party manufacturers or on our own, in a timely or cost-effective manner or at all. If a contract manufacturer makes improvements in the manufacturing process for our drug candidates, we may not own, or may have to share, the intellectual property rights to those improvements. Significant changes or scale-up of manufacturing may require additional validation studies, which are costly and which regulatory authorities must review and approve. In addition, quality issues may arise during those changes or scale-up activities because of the inherent properties of a drug candidate itself or of a drug candidate in combination with other components added during the manufacturing and packaging process, or during shipping and storage of the finished product or active pharmaceutical ingredients. If we are unable to successfully manufacture of any of our drug candidates in sufficient quality and quantity, the development of that drug candidate and regulatory approval or commercial launch for any resulting drugs may be delayed or there may be a shortage in supply, which could significantly harm our business. In addition, data demonstrating the stability of both drug substance and drug product, using the commercial manufacturing process and at commercial scale, are required for marketing applications. Failure to produce drug substance and drug products in a timely manner and obtain stability data could result in delay of submission of marketing applications.

The mechanisms of action of our drug candidates are unproven, and we do not know whether we will be able to develop any drug of commercial value.

We have discovered and develop drug candidates that have what we believe are novel mechanisms of action directed against cytoskeletal targets. Because no currently-approved drugs appear to operate via the same biochemical mechanisms as our compounds, we cannot be certain that our drug candidates will result in commercially viable drugs that safely and effectively treat the indications for which we intend to develop them.

The results we have seen for our compounds in preclinical models may not translate into similar results in humans, and results of early clinical trials in humans may not be predictive of the results of larger clinical trials that may later be conducted with our drug candidates. Even if we are successful in developing and receiving regulatory approval for a drug candidate for the treatment of a particular disease, we cannot be certain that it will be accepted by prescribers or be reimbursed by insurers or that we will also be able to develop and receive regulatory approval for that or other drug candidates for the treatment of other diseases. If we or our partners are unable to successfully develop and commercialize our drug candidates, our business will be materially harmed.

Moreover, in the event any of our competitors were to develop their own drug candidates that have a similar mechanism of action to any of our drug candidates and compounds, any efficacy or safety concerns identified during the development of such similar drug candidates may have an adverse impact on the development of our own drug candidates. For example, if a competitors' drug candidate having a similar mechanism of action as any of our own drug candidates is shown in clinical trials to give rise to serious safety concerns or have poor efficacy when administered to the target patient population, the FDA or other regulatory bodies may subject our drug candidates to increased scrutiny, leading to additional delays in development and potentially decreasing the chance of ultimate approval of our own drug candidates.

Our success depends substantially upon our ability to obtain and maintain intellectual property protection relating to our drug candidates, compounds and research technologies.

We own, co-own or hold exclusive licenses to a number of U.S. and foreign patents and patent applications directed to our drug candidates, compounds and research technologies. Our success depends on our ability to obtain patent protection both in the United States and in other countries for our drug candidates, their methods of manufacture and use, and our technologies. Our ability to protect our drug candidates, compounds and technologies from unauthorized or infringing use by third parties depends substantially on our ability to obtain and enforce our patents. If our issued patents and patent applications, if granted, do not adequately describe, enable or otherwise provide coverage of our technologies and drug candidates, we or our licensees would not be able to exclude others from developing or commercializing these drug candidates. Furthermore, the degree of future protection of our proprietary rights is uncertain because legal means may not adequately protect our rights or permit us to gain or keep our competitive advantage. If we are unable to obtain and maintain sufficient intellectual property protection for our technologies and drug candidates, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize drug candidates similar or identical to ours, and our ability to successfully commercialize product candidates that we may pursue may be impaired.

Obtaining and enforcing biopharmaceutical patents is costly, time consuming and complex, and we may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed to third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

Due to evolving legal standards relating to the patentability, validity and enforceability of patents covering pharmaceutical inventions and the claim scope of these patents, our ability to enforce our existing patents and to obtain and enforce patents that may issue from any pending or future patent applications is uncertain and involves complex legal, scientific and factual questions. The standards which the U.S. Patent and Trademark Office and its foreign counterparts use to grant patents are not always applied predictably or uniformly and are subject to change. To date, no consistent policy has emerged regarding the breadth of claims allowed in biotechnology and pharmaceutical patents. Thus, we cannot be sure that any patents will issue from any pending or future patent applications owned by, co-owned by or licensed to us. Even if patents do issue, we cannot be sure that the claims of these patents will be held valid or enforceable by a court of law, will provide us with any

significant protection against competitive products, or will afford us a commercial advantage over competitive products. In particular:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications or issued patents;
- we or our licensors might not have been the first to file patent applications for the inventions covered by our pending patent applications or issued patents;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- some or all of our or our licensors' pending patent applications may not result in issued patents or the claims that issue may be narrow in scope and not provide us with competitive advantages;
- our and our licensors' issued patents may not provide a basis for commercially viable drugs or therapies or may be challenged and invalidated by third parties;
- our or our licensors' patent applications or patents may be subject to interference, post-grant proceedings, derivation, reexamination, inter partes review, opposition or similar legal and administrative proceedings that may result in a reduction in their scope or their loss altogether;
- we may not develop additional proprietary technologies or drug candidates that are patentable; or
- the patents of others may prevent us or our partners from discovering, developing or commercializing our drug candidates.

We may not be able to protect our intellectual property rights throughout the world. Patent protection is afforded on acountry-by-country basis. Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. Many companies have encountered significant difficulties in protecting and defending intellectual property rights in foreign jurisdictions. Some of our development efforts are performed in countries outside of the United States through third-party contractors. We may not be able to effectively monitor and assess intellectual property developed by these contractors. We therefore may not be able to effectively protect this intellectual property and could lose potentially valuable intellectual property rights. In addition, the legal protection afforded to inventors and owners of intellectual property in countries outside of the United States may not be as protective of intellectual property rights as in the United States. Therefore, we may be unable to acquire and protect intellectual property developed by these contractors to the same extent as if these development activities were being conducted in the United States. If we encounter difficulties in protecting our intellectual property rights in foreign jurisdictions, our business prospects could be substantially harmed.

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

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

fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the United States Patent and Trademark Office and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. Non-compliance could 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, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property. We rely on intellectual property assignment agreements with our corporate partners, employees, consultants, scientific advisors and other collaborators to grant us ownership of new intellectual property that is developed. These agreements may not result in the effective assignment to us of that intellectual property. As a result, our ownership of key intellectual property could be compromised.

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

We are a party to license agreements and may need to obtain additional licenses from others to advance our research and development activities or allow the commercialization of our drug candidates and future drug candidates we may identify and pursue. If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or these agreements are terminated or we otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business. Our licensors might conclude that we have materially breached our obligations under such license agreements and might therefore terminate, or seek to terminate, the license agreements, thereby removing or limiting our ability to develop and commercialize products and technology covered by these license agreements. If our license agreements are terminated, we may be required to cease our development and commercialization of our product candidates. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects. Moreover, disputes may arise regarding intellectual property subject to a licensing agreement. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

Changes in either the patent laws or their interpretation in the United States or other countries may diminish the value of our intellectual property or our ability to obtain patents. For example, the America Invents Act of 2011 may affect the scope, strength and enforceability of our patent rights in the United States or the nature of proceedings which may be brought by us related to our patent rights in the United States.

If one or more products resulting from our drug candidates is approved for sale by the FDA and we do not have adequate intellectual property protection for those products, competitors could duplicate them for approval and sale in the United States without repeating the extensive testing required of us or our partners to obtain FDA approval. Regardless of any patent protection, under current law, an application for a generic version of a new chemical entity cannot be approved until at least five years after the FDA has approved the original product. When that period expires, or if that period is altered, the FDA could approve a generic version of our product regardless of our patent protection. An applicant for a generic version of our product may only be required to conduct a relatively inexpensive study to show that its product is bioequivalent to our product, and may not have to repeat the lengthy and expensive clinical trials that we or our partners conducted to demonstrate that the product is safe and effective. In the absence of adequate patent protection for our products in other countries, competitors may similarly be able to obtain regulatory approval in those countries of generic versions of our products.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.

We also rely on trade secrets to protect our technology, particularly where we believe patent protection is not appropriate or obtainable. However, trade secrets are often difficult to protect, especially outside of the United States. While we endeavor to use reasonable efforts to protect our trade secrets, our or our partners' employees, consultants, contractors or scientific and other advisors may unintentionally or willfully disclose our information to competitors. In addition, confidentiality agreements, if any, executed by those individuals may not be enforceable or provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure. We cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Pursuing a claim that a third party had illegally obtained and was using our trade secrets would be expensive and time-consuming, and the outcome would be unpredictable. Even if we are able to maintain our trade secrets as confidential, if our competitors lawfully obtain or independently develop information equivalent or similar to our trade secrets, our business could be harmed.

If we are not able to defend the patent or trade secret protection position of our technologies and drug candidates, then we will not be able to exclude competitors from developing or marketing competing drugs, and we may not generate enough revenue from product sales to justify the cost of development of our drugs or to achieve or maintain profitability.

If we are sued for infringing third-party intellectual property rights, it will be costly and time-consuming, and an unfavorable outcome could have a significant adverse effect on our business.

Our ability to commercialize drugs depends on our ability to use, manufacture and sell those drugs without infringing the patents or other proprietary rights of third parties. Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the therapeutic areas in which we are developing drug candidates and seeking new potential drug candidates. In addition, because patent applications can take several years to issue, there may be currently pending applications, unknown to us, which could later result in issued patents that our activities with our drug candidates could infringe. There may also be existing patents, unknown to us, that our activities with our drug candidates could infringe.

Other future products of ours may be impacted by patents of companies engaged in competitive programs with significantly greater resources. Further development of these products could be impacted by these patents and result in significant legal fees.

If a third party claims that our actions infringe its patents or other proprietary rights, we could face a number of issues that could seriously harm our competitive position, including, but not limited to:

- infringement and other intellectual property claims that, even if meritless, can be costly and time-consuming to litigate, delay the regulatory approval process and divert management's attention from our core business operations;
- substantial damages for past infringement which we may have to pay if a court determines that our drugs or technologies infringe a third party's patent or other proprietary rights;
- a court prohibiting us from selling or licensing our drugs or technologies unless the holder licenses the patent or other proprietary rights to us, which it is not required to do; and
- if a license is available from a holder, we may have to pay substantial royalties or grant cross-licenses to our patents or other proprietary rights.

If any of these events occur, it could significantly harm our business and negatively affect our stock price.

We may undertake infringement or other legal proceedings against third parties, causing us to spend substantial resources on litigation and exposing our own intellectual property portfolio to challenge.

Third parties may infringe our patents. To prevent infringement or unauthorized use, we may need to file infringement suits, which are expensive and time-consuming. In an infringement proceeding, a court may decide that one or more of our patents is invalid, unenforceable, or both. In such case third parties may be able to use our technology without paying licensing fees or royalties. Even if the validity of our patents is upheld, a court may refuse to stop the other party from using the technology at issue on the ground that the other party's activities are not covered by our patents. Policing unauthorized use of our intellectual property is difficult, and we may not be able to prevent misappropriation of our proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States. In addition, third parties may affirmatively challenge our rights to, or the scope or validity of, our patent rights.

The uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to conduct clinical trials, continue our research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring our drug candidates or other product candidates that we may identify to market. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

We may become involved in disputes with our strategic partners over intellectual property ownership, and publications by our research collaborators and clinical investigators could impair our ability to obtain patent protection or protect our proprietary information, either of which would have a significant impact on our business.

Inventions discovered under our current or future strategic alliance agreements may become jointly owned by our strategic partners and us in some cases, and the exclusive property of one of us in other cases. Under some circumstances, it may be difficult to determine who owns a particular invention or whether it is jointly owned, and disputes could arise regarding ownership or use of those inventions. These disputes could be costly and time-consuming, and an unfavorable outcome could have a significant adverse effect on our business if we were not able to protect or license rights to these inventions. In addition, our research collaborators and clinical investigators generally have contractual rights to publish data arising from their work. Publications by our research collaborators and clinical investigators relating to our research and development programs, either with or without our consent, could benefit our current or potential competitors and may impair our ability to obtain patent protection or protect our proprietary information, which could significantly harm our business.

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

Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no legal proceedings against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. If we fail in defending these claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper or prevent our ability to develop and commercialize certain potential drugs, which could significantly harm our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and distract management.

Our competitors may develop drugs that are less expensive, safer or more effective than ours, which may diminish or eliminate the commercial success of any drugs that we may commercialize.

We compete with companies that have developed drugs or are developing drug candidates for cardiovascular diseases, diseases and conditions associated with muscle weakness or wasting and other diseases for which our drug candidates may be useful treatments. For example, if reldesemtiv is approved for marketing by the FDA or other regulatory authorities for the treatment of ALS, it will then compete with RADICAVA™ (edaravone), the first FDA approved drug for the treatment of ALS since riluzole in 1995, and may then compete with other potential new therapies for ALS that are currently being developed by companies including, but not limited to, Orphazyme, NeuralStem, MediciNova, Ionis Pharmaceuticals, Inc. (in collaboration with Biogen Inc.), AB Sciences, Orion, Pharmaceuticals, Mitsubishi Tanabe Pharma Corporation, Treeway, Genentech, Inc., and BrainStorm Cell Therapeutics. Also, if reldesemtiv is approved by the FDA or other regulatory authorities for the treatment of SMA, it will then compete with SPINRAZA® (nusinersen) and Zolgensma® (onasemnogene abeparvovec-xioi) and may then compete with other potential new therapies being developed by companies including, but not limited to, Roche (in collaboration with PTC Therapeutics). If reldesemtiv is approved by the FDA or other regulatory authorities for the treatment of non-neuromuscular indications associated with muscle weakness, it may then compete with other potential new therapies being developed by companies including, but not limited to, Regeneron Pharmaceuticals, Inc. (in collaboration with Sanofi), Eli Lilly and Company, Stealth Biotherapeutics, and Novartis (in collaboration with MorphoSys AG).

If omecamtiv mecarbil is approved for marketing by the FDA or other regulatory authorities for the treatment of heart failure, it would compete against other drugs used for the treatment of acute and chronic heart failure. These include generic drugs, such as milrinone, dobutamine or digoxin and branded drugs such as Natrecor® (nesiritide), Corlanor® (ivabradine), and Entresto® (sacubitril/valsartan). Omecamtiv mecarbil could also potentially compete against other novel drug candidates and therapies in development, such as those being developed by, but not limited to, Novartis, Bayer, Stealth Biotherapeutics, and MyoKardia. Omecamtiv mecarbil may also compete with currently approved products, such as in the SGLT2 class, that may expand their labels to include treatment of patients with heart failure, including Forxiga®, Invokana®, and Jardiance®. In addition, there are a number of medical devices both marketed and in development for the potential treatment of heart failure.

Our competitors may:

- develop drug candidates and market drugs that are less expensive or more effective than our future drugs;
- commercialize competing drugs before we or our partners can launch any drugs developed from our drug candidates;
- hold or obtain proprietary rights that could prevent us from commercializing our products;
- initiate or withstand substantial price competition more successfully than we can;

- more successfully recruit skilled scientific workers and management from the limited pool of available talent;
- more effectively negotiate third-party licenses and strategic alliances;
- take advantage of acquisition or other opportunities more readily than we can;
- develop drug candidates and market drugs that increase the levels of safety or efficacy that our drug candidates will need to show in order to obtain regulatory approval; or
- introduce therapies or market drugs that render the market opportunity for our potential drugs obsolete.

We will compete for market share against large pharmaceutical and biotechnology companies and smaller companies that are collaborating with larger pharmaceutical companies, new companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors, either alone or together with their partners, may develop new drug candidates that will compete with ours. Many of these competitors have larger research and development programs or substantially greater financial resources than we do. Our competitors may also have significantly greater experience in:

- developing drug candidates;
- undertaking preclinical testing and clinical trials;
- building relationships with key customers and opinion-leading physicians;
- obtaining and maintaining FDA and other regulatory approvals of drug candidates;
- formulating and manufacturing drugs; and
- launching, marketing and selling drugs.

If our competitors market drugs that are less expensive, safer or more efficacious than our potential drugs, or that reach the market sooner than our potential drugs, we may not achieve commercial success. In addition, the life sciences industry is characterized by rapid technological change. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Our competitors may render our technologies obsolete by improving existing technological approaches or developing new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our research approach and proprietary technologies.

We have been granted orphan designation by the FDA and EMA for reldesemtiv for the potential treatment of SMA; however, there can be no guarantee that we will receive orphan approval for reldesemtiv, nor that we will be able to prevent third parties from developing and commercializing products that are competitive to reldesemtiv.

We have been granted orphan drug designation in the U.S. by the FDA for reldesemtiv for the potential treatment of SMA. In the U.S., upon approval from the FDA of an NDA, products granted orphan drug designation are generally provided with seven years of marketing exclusivity in the U.S., meaning the FDA will generally not approve applications for other product candidates that contain the same active ingredient for the same orphan indication. Even if we are the first to obtain approval of an orphan product and are granted such exclusivity in the U.S., there are limited circumstances under which a later competitor product may be approved for the same indication during the seven-year period of marketing exclusivity, such as if the later product is shown to be clinically superior to our product or due to an inability to assure a sufficient quantity of the orphan drug.

EMA has granted orphan medicinal product designation to reldesemtiv for the potential treatment of SMA. Orphan medicinal product status in the Europe Union can provide up to 10 years of marketing exclusivity, meaning that another application for marketing authorization of a later similar medicinal product for the same

therapeutic indication will generally not be approved in the European Union. Although we may have drug candidates that may obtain orphan drug exclusivity in Europe, the orphan approval and associated exclusivity period may be modified for several reasons, including a significant change to the orphan medicinal product designations or approval criteria after-market authorization of the orphan product (e.g., product profitability exceeds the criteria for orphan drug designation), problems with the production or supply of the orphan drug or a competitor drug, although similar, is safer, more effective or otherwise clinically superior than the initial orphan drug.

We are not guaranteed to maintain orphan status for reldesemtiv or to receive orphan status for reldesemtiv for any other indication or for any of our other drug candidates for any indication. If our drug candidates that are granted orphan status were to lose their status as orphan drugs or the marketing exclusivity provided for them in the U.S. or the European Union, our business and results of operations could be materially adversely affected. While orphan status for any of our products, if granted or maintained, would provide market exclusivity in the U.S. and the European Union for the time periods specified above, we would not be able to exclude other companies from manufacturing and/or selling products using the same active ingredient for the same indication beyond the exclusivity period applicable to our product on the basis of orphan drug status. Moreover, we cannot guarantee that another company will not receive approval before we do of an orphan drug application in the U.S. or the European Union for a product candidate that has the same active ingredient or is a similar medicinal product for the same indication as any of our drug candidates for which we plan to file for orphan designation and status. If that were to happen, our orphan drug applications for our drug candidate for that indication may not be approved until the competing company's period of exclusivity has expired in the U.S. or the European Union, as applicable. Further, application of the orphan drug regulations in the U.S. and Europe is uncertain, and we cannot predict how the respective regulatory bodies will interpret and apply the regulations to our or our competitors' products.

Our failure to attract and retain skilled personnel could impair our drug development, commercialization and financial reporting activities.

Our business depends on the performance of our senior management and key scientific and technical personnel. The loss of the services of any member of our senior management or key scientific, technical or financial reporting staff may significantly delay or prevent the achievement of drug development and other business objectives by diverting management's attention to transition matters and identifying suitable replacements. For example, our management concluded that our internal controls over financial reporting were not effective as of December 31, 2018 because an unremediated material weakness existed in our internal control over financial reporting related to employee turnover resulting in a temporary lack of resources in financial reporting roles with the appropriate skills to perform effective review during our financial statement close process. We also rely on consultants and advisors to assist us in formulating our research and development strategy. All of our consultants and advisors are either self-employed or employed by other organizations, and they may have conflicts of interest or other commitments, such as consulting or advisory contracts with other organizations, that may affect their ability to contribute to us. In addition, if and as our business grows, we will need to recruit additional executive management and scientific, technical and financial reporting personnel. There is intense competition for skilled executives and employees with relevant scientific and technical expertise, and this competition is likely to continue. Our inability to attract and retain sufficient scientific, technical and managerial personnel could limit or delay our product development activities, which would adversely affect the development of our drug candidates and commercialization of our potential drugs and growth of our business.

Any future workforce and expense reductions may have an adverse impact on our internal programs and our ability to hire and retain skilled personnel.

Our future success will depend in large part upon our ability to attract and retain highly skilled personnel. In light of our continued need for funding and cost control, we may be required to implement future workforce and expense reductions, which could further limit our research and development activities. We may have difficulty

retaining and attracting such personnel as a result of a perceived risk of future workforce reductions. In addition, the implementation of any workforce or expense reduction programs may divert the efforts of our management team and other key employees, which could adversely affect our business.

We may expand our development and clinical research capabilities and, as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We may have growth in our expenditures, the number of our employees and the scope of our operations, in particular with respect to those drug candidates that we elect to develop or commercialize independently or together with a partner. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The physical expansion of our operations may lead to significant costs and may divert our management and business development resources. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

We currently have no sales or marketing capabilities and, if we are unable to enter into or maintain strategic alliances with marketing partners or to develop our own sales and marketing capabilities, we may not be successful in commercializing our potential drugs.

We currently have no sales, marketing or distribution capabilities. We plan to commercialize drugs that can be effectively marketed and sold in concentrated markets that do not require a large sales force to be competitive. To achieve this goal, we will need to establish our own specialized sales force and marketing organization with technical expertise and supporting distribution capabilities. Developing such an organization is expensive and time-consuming and could delay a product launch. In addition, we may not be able to develop this capacity efficiently, cost-effectively or at all, which could make us unable to commercialize our drugs. If we determine not to market our drugs on our own, we will depend on strategic alliances with third parties, such as Amgen and Astellas, which have established distribution systems and direct sales forces to commercialize them. If we are unable to enter into such arrangements on acceptable terms, we may not be able to successfully commercialize these drugs. To the extent that we are not successful in commercializing any drugs ourselves or through a strategic alliance, our product revenues and business will suffer and our stock price would decrease.

Our internal computer systems, or those of our CROs, CMOs, supply chain partners, collaboration partners or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our drug development programs.

Despite the implementation of security measures, our internal computer systems and those of our third-party CROs, CMOs, supply chain partners, collaboration partners and other contractors and consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our drug development programs. For example, the loss of clinical study data from completed or ongoing clinical studies for any of our drug candidates could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, our operations could be compromised and the further development of our product candidates could be delayed.

Significant disruptions of information technology systems or breaches of data security could adversely affect our business.

Our business is increasingly dependent on complex and interdependent information technology systems, including internet-based systems, databases and programs, to support our business processes as well as internal

and external communications. As use of information technology systems has increased, deliberate attacks and attempts to gain unauthorized access to computer systems and networks have increased in frequency and sophistication. Our information technology, systems and networks are potentially vulnerable to breakdown, malicious intrusion and computer viruses which may result in the impairment of production and key business processes or loss of data or information. We are also potentially vulnerable to data security breaches—whether by employees or others—which may expose sensitive data to unauthorized persons. We have in the past and may in the future be subject to security breaches. For example, in February 2018, we discovered that our e-mail server suffered unauthorized intrusions in which proprietary business information was accessed. Although we do not believe that we have experienced any material losses related to security breaches, including in two recent email "phishing" incidents, there can be no assurance that we will not suffer such losses in the future. Breaches and other inappropriate access can be difficult to detect and any delay in identifying them could increase their harm. While we have implemented security measures to protect our data security and information technology systems, such measures may not prevent such events. Any such breaches of security and inappropriate access could disrupt our operations, harm our reputation or otherwise have a material adverse effect on our business, financial condition and results of operations.

Our reported financial results may be adversely affected by changes in accounting principles generally accepted in the U.S.

We prepare our financial statements in conformity with accounting principles generally accepted in the U.S. These accounting principles are subject to interpretation by the Financial Accounting Standards Board and the SEC. A change in these policies or interpretations could have a significant effect on our reported financial results, may retroactively affect previously reported results, could cause unexpected financial reporting fluctuations, and may require us to make costly changes to our operational processes and accounting systems.

We are a smaller reporting company, and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to smaller reporting companies could make our common stock less attractive to investors.

We are a "smaller reporting company," as defined under the Exchange Act, in accordance with the amendments to such definition that became effective on September 10, 2018. For as long as we continue to be a smaller reporting company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies that are not smaller reporting companies, including, but not limited to, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. In addition, as a smaller reporting company, we are only required to include two years of audited financial statements in our annual reports. Investors could find our common stock less attractive if we choose to rely on these scaled disclosure requirements. If some investors find our common stock less attractive as a result of any choices to reduce future disclosure, there may be a less active trading market for our common stock and our stock price may be more volatile.

We will remain a "smaller reporting company" until (i) the market value of our common shares held by non-affiliates exceeds $250 million as of June 30 of any year; or (ii) either (a) our annual revenues exceed $100 million or (b) the market value of our common shares held by non-affiliates exceeds $700 million, as of June 30 of any year.

Our revenue to date has been primarily derived from our research and license agreements, which can result in significant fluctuation in our revenue from period to period, and our past revenue is therefore not necessarily indicative of our future revenue.

Our revenue is primarily derived from our research and license agreements, from which we receive upfront fees, contract research payments, milestone and other contingent payments based on clinical progress, regulatory progress or net sales achievements and royalties. Significant variations in the timing of receipt of cash payments

and our recognition of revenue can result from significant payments based on the execution of new research and license agreements, the timing of clinical outcomes, regulatory approval, commercial launch or the achievement of certain annual sales thresholds. The amount of our revenue derived from research and license agreements in any given period will depend on a number of unpredictable factors, including our ability to find and maintain suitable collaboration partners, the timing of the negotiation and conclusion of collaboration agreements with such partners, whether and when we or our collaboration partners achieve clinical, regulatory and sales milestones, the timing of regulatory approvals in one or more major markets, reimbursement levels by private and government payers, and the market introduction of new drugs or generic versions of the approved drug, as well as other factors. Our past revenue generated from these agreements is not necessarily indicative of our future revenue. If any of our existing or future collaboration partners fails to develop, obtain regulatory approval for, manufacture or ultimately commercialize any product candidate under our collaboration agreement, our business, financial condition, and results of operations could be materially and adversely affected.

The Term Loan bears interest at variable interest rates based on LIBOR. Changes in the method of determining LIBOR, or the replacement of LIBOR with an alternative reference rate, may adversely affect interest rates on our current or future indebtedness and may otherwise adversely affect our financial condition and results of operations.

In July 2017, the Financial Conduct Authority, the authority that regulates LIBOR, announced that it intended to stop compelling banks to submit rates for the calculation of LIBOR after 2021. The Alternative Reference Rates Committee, or ARRC, in the U.S. has proposed that the Secured Overnight Financing Rate, SOFR, is the rate that represents best practice as the alternative to the U.S. dollar LIBOR for use in derivatives and other financial contracts that are currently indexed to LIBOR. ARRC has proposed a paced market transition plan to SOFR from U.S. dollar LIBOR and organizations are currently working on industry-wide and company-specific transition plans as relating to derivatives and cash markets exposed to U.S. dollar LIBOR. We have certain financial contracts, including the loan agreement governing the Term Loan, that are indexed to U.S. dollar LIBOR. Changes in the method of determining LIBOR, or the replacement of LIBOR with an alternative reference rate, may adversely affect interest rates on our current or future indebtedness. Any transition process may involve, among other things, increased volatility or illiquidity in markets for instruments that rely on LIBOR, reductions in the value of certain instruments or the effectiveness of related transactions such as hedges, increased borrowing costs, uncertainty under applicable documentation, or difficult and costly consent processes. We are monitoring this activity and evaluating the related risks, and any such effects of the transition away from LIBOR may result in increased expenses, may impair our ability to refinance our indebtedness or hedge our exposure to floating rate instruments, or may result in difficulties, complications or delays in connection with future financing efforts, any of which could adversely affect our financial condition and results of operations.

Risks Related to Our Industry

The regulatory approval process is expensive, time-consuming and uncertain and may prevent our partners or us from obtaining approvals to commercialize some or all of our drug candidates.

The research, testing, manufacturing, selling and marketing of drugs are subject to extensive regulation by the FDA and other regulatory authorities in the United States and other countries, and regulations differ from country to country. Neither we nor our partners are permitted to market our potential drugs in the United States until we receive approval of a new drug application, or NDA, from the FDA. Neither we nor our partners have received NDA or other marketing approval for any of our drug candidates.

Obtaining NDA approval is a lengthy, expensive and uncertain process. In addition, failure to comply with FDA and other applicable foreign and U.S. regulatory requirements may subject us to administrative or judicially imposed sanctions. These include warning letters, civil and criminal penalties, injunctions, product seizure or detention, product recalls, total or partial suspension of production, and refusal to approve pending NDAs or supplements to approved NDAs.

Regulatory approval of an NDA or NDA supplement is never guaranteed, and the approval process typically takes several years and is extremely expensive. The FDA and foreign regulatory agencies also have substantial discretion in the drug approval process, and the guidance and advice issued by such agencies is subject to change at any time. Despite the time and efforts exerted, failure can occur at any stage, and we may encounter problems that cause us to abandon clinical trials or to repeat or perform additional preclinical testing and clinical trials. The number and focus of preclinical studies and clinical trials that will be required for approval by the FDA and foreign regulatory agencies varies depending on the drug candidate, the disease or condition that the drug candidate is designed to address, and the regulations applicable to any particular drug candidate. In addition, the FDA may require that a proposed Risk Evaluation and Mitigation Strategy, or REMS, be submitted as part of an NDA if the FDA determines that it is necessary to ensure that the benefits of the drug outweigh its risks. The FDA and foreign regulatory agencies can delay, limit or deny approval of a drug candidate for many reasons, including, but not limited to:

- they might determine that a drug candidate is not safe or effective;
- they might not find the data from non-clinical testing and clinical trials sufficient and could request that additional trials be performed;
- they might not approve our, our partner's or the contract manufacturer's processes or facilities; or
- they might change their approval policies or adopt new regulations.

Even if we receive regulatory approval to manufacture and sell a drug in a particular regulatory jurisdiction, other jurisdictions' regulatory authorities may not approve that drug for manufacture and sale. If we or our partners fail to receive and maintain regulatory approval for the sale of any drugs resulting from our drug candidates, it would significantly harm our business and negatively affect our stock price.

If we or our partners receive regulatory approval for our drug candidates, we or they will be subject to ongoing obligations to and continued regulatory review by the FDA and foreign regulatory agencies, and may be subject to additional post-marketing obligations, all of which may result in significant expense and limit commercialization of our potential drugs.

Any regulatory approvals that we or our partners receive for our drug candidates may be subject to limitations on the indicated uses for which the drug may be marketed or require potentially costly post-marketing follow-up studies or compliance with a REMS. In addition, if the FDA or foreign regulatory agencies approves any of our drug candidates, the labeling, packaging, adverse event reporting, storage, advertising, promotion and record-keeping for the drug will be subject to extensive regulatory requirements. The subsequent discovery of previously unknown problems with the drug, including adverse events of unanticipated severity or frequency, or the discovery that adverse events or toxicities observed in preclinical research or clinical trials that were believed to be minor constitute much more serious problems, may result in restrictions on the marketing of the drug or withdrawal of the drug from the market.

The FDA and foreign regulatory agencies may change their policies and additional government regulations may be enacted that could prevent or delay regulatory approval of our drug candidates. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we might not be permitted to market our drugs and our business would suffer.

If physicians and patients do not accept our drugs, we may be unable to generate significant revenue, if any.

Even if our drug candidates obtain regulatory approval, the resulting drugs, if any, may not gain market acceptance among physicians, healthcare payors, patients and the medical community. Even if the clinical safety

and efficacy of drugs developed from our drug candidates are established for purposes of approval, physicians may elect not to recommend these drugs for a variety of reasons including, but not limited to:

- introduction of competitive drugs to the market;
- clinical safety and efficacy of alternative drugs or treatments;
- cost-effectiveness;
- availability of coverage and reimbursement from health maintenance organizations and other third-party payors;
- convenience and ease of administration;
- prevalence and severity of adverse events;
- other potential disadvantages relative to alternative treatment methods; or
- insufficient marketing and distribution support.

If our drugs fail to achieve market acceptance, we may not be able to generate significant revenue and our business would suffer.

Recently enacted and future legislation, including potentially unfavorable pricing regulations or other healthcare reform initiatives, may increase the difficulty and cost for us to obtain regulatory approval of and commercialize our product candidates and affect the prices we may obtain.

The regulations that govern, among other things, regulatory approvals, coverage, pricing and reimbursement for new drug products vary widely from country to country. 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 regulatory approval of our product candidates, restrict or regulate post-approval activities and affect our ability to successfully sell any product candidates for which we obtain regulatory approval. In particular, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, the ACA, was enacted, which substantially changes the way health care is financed by both governmental and private insurers, and significantly impacts the U.S. pharmaceutical industry. The ACA and its implementing regulations, among other things, addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for certain drugs and biologics, including our product candidates that are inhaled, infused, instilled, implanted or injected, increased the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program, extended the Medicaid Drug Rebate Program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs, provided incentives to programs that increase the federal government's comparative effectiveness research and established a new Medicare Part D coverage gap discount program.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by the U.S. 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, which went into effect in April 2013, and, due to subsequent legislative amendments, will remain in effect through 2029 unless additional Congressional action is taken. In January 2013, the American Taxpayer Relief Act of 2012 was enacted which, among other things, further reduced Medicare payments to several providers, including hospitals and outpatient clinics, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Since its enactment, there have been judicial and Congressional challenges to numerous elements of the ACA, as well as efforts by both the executive and legislative branches of the federal government to repeal or replace certain aspects of the ACA. For example, the President signed Executive Orders designed to delay the implementation of certain provisions of the ACA or otherwise circumvent some of the requirements for health insurance mandated by the ACA. In addition, the U.S. Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. While the U.S. 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 mandated fees, and increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D. In December 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Cuts and Jobs Act of 2017, or the Tax Act. The Texas U.S. District Court Judge, as well as the presidential administration and the CMS, have stated that the ruling will have no immediate effect pending appeal of the decision, but it is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the ACA will impact the ACA and our business. The U.S. Congress may consider and adopt other legislation to repeal and replace all or certain elements of the ACA. Any other executive, legislative or judicial action to "repeal and replace" all or part of the ACA may have the effect of limiting the amounts that government agencies will pay for healthcare products and services, which could result in reduced demand for our products or additional pricing pressure, or may lead to significant deregulation, which could make the introduction of competing products and technologies much easier. Policy changes, including potential modification or repeal of all or parts of the ACA or the implementation of new health care legislation, could result in significant changes to the health care system which may adversely affect our business in unpredictable ways.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of governments, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare, including by imposing price controls, may adversely affect the demand for our product candidates for which we obtain regulatory approval and our ability to set a price that we believe is fair for our products. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We cannot be sure whether additional legislative changes will be enacted, or whether the FDA or foreign regulations, guidance or interpretations will be changed, or what the impact of these changes on the regulatory approvals of our product candidates, if any, may be. In the United States, the European Union and other potentially significant markets for our product candidates, government authorities and third-party payors are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. For example, in the United States, 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 drugs. Additionally, in May 2018, the U.S. presidential administration laid out 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. The U.S. Department of Health and Human Services, or HHS, has started the process of soliciting feedback on some of these measures and, at the same time, is immediately implementing others under its existing authority. In January 2019, the HHS Office of Inspector General proposed modifications to U.S. federal healthcare Anti-Kickback Statute safe harbors, which, among other things, will affect rebates paid by manufacturers to Medicare Part D plans, the purpose of which is to further reduce the cost of drug products to consumers. Although some of these and other proposals may require authorization through

additional legislation to become effective, members of Congress and the presidential administration have indicated that they 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, to encourage importation from other countries and bulk purchasing. Furthermore, the increased emphasis on managed healthcare in the United States and on country and regional pricing and reimbursement controls in the European Union will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our future product sales. These pressures can arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical reimbursement policies and pricing in general.

In addition, there is significant uncertainty regarding the reimbursement status of newly approved healthcare products. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness of our products. If third-party payors do not consider our products to be cost-effective compared to other therapies, the payors may not cover our products after approved as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products on a profitable basis.

We may be subject to costly product liability or other liability claims and may not be able to obtain adequate insurance.

The use of our drug candidates in clinical trials may result in adverse events. We cannot predict all the possible harms or adverse events that may result from our clinical trials. We currently maintain limited product liability insurance. We may not have sufficient resources to pay for any liabilities resulting from a personal injury or other claim excluded from, or beyond the limit of, our insurance coverage. Our insurance does not cover third parties' negligence or malpractice, and our clinical investigators and sites may have inadequate insurance or none at all. In addition, in order to conduct clinical trials or otherwise carry out our business, we may have to contractually assume liabilities for which we may not be insured. If we are unable to look to our own insurance or a third party's insurance to pay claims against us, we may have to pay any arising costs and damages ourselves, which may be substantial.

In addition, if we commercially launch drugs based on our drug candidates, we will face even greater exposure to product liability claims. This risk exists even with respect to those drugs that are approved for commercial sale by the FDA and foreign regulatory agencies and manufactured in licensed and regulated facilities. We intend to secure additional limited product liability insurance coverage for drugs that we commercialize, but may not be able to obtain such insurance on acceptable terms with adequate coverage, or at reasonable costs. Even if we are ultimately successful in product liability litigation, the litigation would consume substantial amounts of our financial and managerial resources and may create adverse publicity, all of which would impair our ability to generate sales of the affected product and our other potential drugs. Moreover, product recalls may be issued at our discretion or at the direction of the FDA and foreign regulatory agencies, other governmental agencies or companies having regulatory control for drug sales. Product recalls are generally expensive and often have an adverse effect on the reputation of the drugs being recalled and of the drug's developer or manufacturer.

We may be required to indemnify third parties against damages and other liabilities arising out of our development, commercialization and other business activities, which could be costly and time-consuming and distract management. If third parties that have agreed to indemnify us against damages and other liabilities arising from their activities do not fulfill their obligations, then we may be held responsible for those damages and other liabilities.

Our relationships with customers, healthcare providers, clinical trial sites and professionals and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other laws and regulations. If we fail to comply with federal, state and foreign laws and regulations, including healthcare, privacy and data security laws and regulations, we could face criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors play a primary role in the recommendation and prescription of any drug candidates for which we may obtain marketing approval. Our arrangements with customers, healthcare providers and professionals and third-party payors 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 develop, and may market, sell and distribute, our products for which we obtain marketing approval. Restrictions under applicable federal and state healthcare laws and regulations, include, but are not limited to, the following:

- The federal healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federally funded healthcare programs such as Medicare and Medicaid. This statute has been broadly interpreted to apply to manufacturer arrangements with prescribers, purchasers and formulary managers, among others. Several other countries, including the United Kingdom, have enacted similar anti-kickback, fraud and abuse, and healthcare laws and regulations.
- The federal False Claims Act imposes civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. The government and qui tam relators have brought False Claims Act actions against pharmaceutical companies on the theory that their practices have caused false claims to be submitted to the government. There is also a separate false claims provision imposing criminal penalties.
- The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program. HIPAA also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information. HIPAA also imposes criminal liability for 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 Physician Payments Sunshine Act requires manufacturers of drugs, devices, biologics and medical supplies to report to the HHS information related to payments and other transfers of value made to or at the request of covered recipients, such as physicians and teaching hospitals, and physician ownership and investment interests in such manufacturers. Payments made to physicians and research institutions for clinical trials are included within the ambit of this law.
- Analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that

our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations. Exclusion, suspension and debarment from government funded healthcare programs would significantly impact our ability to commercialize, sell or distribute any drug. If any of the physicians or other providers or entities with whom we expect to do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

The collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the European Union, including personal health data, is subject to the EU General Data Protection Regulation, or the GDPR, which became effective in May 2018. The GDPR, which is wide-ranging in scope, imposes several requirements relating to the control over personal data by individuals to whom the personal data relates, the information provided to the individuals, the documentation we must maintain, the security and confidentiality of the personal data, data breach notification and the use of third-party processors in connection with the processing of personal data. The GDPR also imposes strict rules on the transfer of personal data out of the European Union, provides an enforcement authority and authorizes the imposition of large penalties for noncompliance, including the potential for fines of up to €20 million or 4% of the annual global revenues of the non-compliant company, whichever is greater. The GDPR has increased our responsibility and potential liability in relation to personal data that we process compared to prior European Union law, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, which could divert management's attention and increase our cost of doing business. However, despite our ongoing efforts to bring our practices into compliance with the GDPR, we may not be successful either due to various factors within our control or other factors outside our control. It is also possible that local data protection authorities may have different interpretations of the GDPR, leading to potential inconsistencies amongst various European Union Member States. Any failure or alleged failure (including as a result of deficiencies in our policies, procedures or measures relating to privacy, data security, marketing or communications) by us to comply with laws, regulations, policies, legal or contractual obligations, industry standards or regulatory guidance relating to privacy or data security, may result in governmental investigations and enforcement actions, litigation, fines and penalties or adverse publicity. In addition, new regulation, legislative actions or changes in interpretation of existing laws or regulations regarding data privacy and security (together with applicable industry standards) may increase our costs of doing business. We expect that there will continue to be new proposed laws, regulations and industry standards relating to privacy and data protection in the United States, the European Union and other jurisdictions, such as the California Consumer Privacy Act of 2018 that will go into effect beginning January 1, 2020, and we cannot determine the impact such future laws, regulations and standards will have on our business.

Comprehensive U.S. tax reform legislation could increase the tax burden on our orphan drug programs and adversely affect our business and financial condition.

The U.S. government enacted comprehensive tax legislation in 2017, or the 2017 Tax Act, that includes significant changes to the taxation of business entities. These changes include, among others, (i) a permanent reduction to the corporate income tax rate, (ii) a partial limitation on the deductibility of business interest expense and net operating loss carryforwards, (iii) 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 (iv) a one-time tax on accumulated offshore earnings held in cash and illiquid assets, with the latter taxed at a lower rate. Further, the comprehensive tax legislation, among other things, reduces the orphan drug tax credit from 50% to 25% of qualifying expenditures. When and if we become profitable, this reduction in tax credits may result in an increased federal income tax burden on our orphan drug programs as it may cause us to pay federal income taxes earlier under the revised tax law than under the prior law and, despite being partially off-set by a reduction in the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, may increase our total federal tax liability attributable to such programs.

Notwithstanding the reduction in the corporate income tax rate, the overall impact of this comprehensive tax legislation resulted in an overall reduction in our deferred tax assets, and our business and financial condition could still be adversely affected as additional guidance and regulations are issued with respect to the original tax law change. In addition, it is uncertain if and to what extent various states will conform to this comprehensive tax legislation. The impact of this comprehensive tax legislation on holders of our common stock is also uncertain and could be adverse. Investors should consult with their legal and tax advisors with respect to this comprehensive tax legislation and the potential tax consequences of investing in or holding our common stock.

Our ability to use net operating loss carryforwards and tax credit carryforwards to offset future taxable income may be subject to certain limitations, and ownership changes may limit our ability to use our net operating losses and tax credits in the future.

Our ability to use our federal and state net operating loss carryforwards, or NOLs, to offset potential future taxable income and reduce related income taxes depends upon our generation of future taxable income. We cannot predict with certainty when, or whether, we will generate sufficient taxable income to use our NOLs.

Our federal NOLs generated prior to 2018 will continue to be governed by tax rules in effect prior to the 2017 Tax Act, with unused NOLs expiring 20 years after we report a tax loss. These NOLs could expire unused and be unavailable to offset future taxable income. We cannot predict if and to what extent various states will conform to the 2017 Tax Act.

In addition, generally, if one or more stockholders or groups of stockholders who owns at least 5% of stock increases its ownership by more than 50% over its lowest ownership percentage within a three-year testing period, an ownership change occurs, or an Ownership Change. Our ability to utilize our NOLs and tax credit carryforwards to reduce taxes payable in a year we have taxable income may be limited if there has been an Ownership Change in our stock. Similar rules may apply under state tax laws. We may experience Ownership Changes in the future as a result of future stock sales or other changes in the ownership of our stock, some of which are beyond our control and, as a result, NOLs generated in 2017 and before, may expire unused.

Any material limitation or expiration of our NOLs and tax credit carryforwards may harm our future net income by effectively increasing our future effective tax rate, which could result in a reduction in the market price of our common stock.

Responding to any claims relating to improper handling, storage or disposal of the hazardous chemicals and radioactive and biological materials we use in our business could be time-consuming and costly.

Our research and development processes involve the controlled use of hazardous materials, including chemicals and radioactive and biological materials. Our operations produce hazardous waste products. We cannot eliminate the risk of accidental contamination or discharge and any resultant injury from those materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal of hazardous materials. We may be sued for any injury or contamination that results from our or third parties' use of these materials. Compliance with environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production activities.

Our facilities in California are located near an earthquake fault, and an earthquake or other types of natural disasters, catastrophic events or resource shortages could disrupt our operations and adversely affect our results.

All our facilities and our important documents and records, such as hard and electronic copies of our laboratory books and records for our drug candidates and compounds and our electronic business records, are located in our corporate headquarters at a single location in South San Francisco, California near active earthquake zones. If a natural disaster, such as an earthquake, fire or flood, a catastrophic event such as a disease pandemic or terrorist attack, or a localized extended outage of critical utilities or transportation systems occurs, we could experience a significant business interruption. Our partners and other third parties on which we rely may also be subject to business interruptions from such events. In addition, California from time to time has experienced shortages of water, electric power and natural gas. Future shortages and conservation measures could disrupt our operations and cause expense, thus adversely affecting our business and financial results.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, the documents we have filed with the U.S. Securities and Exchange Commission, or SEC, that are incorporated by reference and any free writing prospectus that we have authorized for use in connection with this offering contain forward-looking statements indicating expectations about future performance and other forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or Securities Act, Section 21E of the Securities Exchange Act of 1934, as amended, or Exchange Act, and the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties. We intend that such statements be protected by the safe harbor created thereby. Forward-looking statements involve risks and uncertainties and our actual results and the timing of events may differ significantly from the results discussed in the forward-looking statements. Examples of such forward-looking statements include, but are not limited to, statements about or relating to:

- our expected uses of the net proceeds to us from this offering, if completed;
- guidance concerning revenues, research and development expenses and general and administrative expenses for 2019;
- the sufficiency of existing resources to fund our operations for at least the next 12 months;
- our capital requirements and needs for additional financing;
- the initiation, design, conduct, enrollment, progress, timing and scope of clinical trials and development activities for our drug candidates conducted by ourselves or our partners, Amgen and Astellas, including the anticipated timing for initiation of clinical trials, anticipated rates of enrollment for clinical trials and anticipated timing of results becoming available or being announced from clinical trials;
- the results from the clinical trials, the non-clinical studies and chemistry, manufacturing, and controls activities of our drug candidates and other compounds, and the significance and utility of such results;
- anticipated interactions with regulatory authorities;
- the suspended development of tirasemtiv, our first-generation fast skeletal muscle troponin activator, for the potential treatment of ALS;
- our and our partners' plans or ability to conduct the continued research and development of our drug candidates and other compounds;
- the advancement of omecamtiv mecarbil in Phase 3 clinical development;
- our expected roles in research, development or commercialization under our strategic alliances with Amgen and Astellas;
- the properties and potential benefits of, and the potential market opportunities for, our drug candidates and other compounds, including the potential indications for which they may be developed;
- the sufficiency of the clinical trials conducted with our drug candidates to demonstrate that they are safe and efficacious;
- our receipt of milestone payments, royalties, reimbursements and other funds from current or future partners under strategic alliances, such as with Amgen or Astellas;
- our ability to continue to identify additional potential drug candidates that may be suitable for clinical development;
- our plans or ability to commercialize drugs, with or without a partner, including our intention to develop sales and marketing capabilities;
- the focus, scope and size of our research and development activities and programs;

- the utility of our focus on the biology of muscle function, and our ability to leverage our experience in muscle contractility to other muscle functions;
- our ability to protect our intellectual property and to avoid infringing the intellectual property rights of others;
- future payments and other obligations under loan and lease agreements;
- potential competitors and competitive products;
- retaining key personnel and recruiting additional key personnel; and
- the potential impact of recent accounting pronouncements on our financial position or results of operations.

Such forward-looking statements involve risks and uncertainties, including, but not limited to:

- Amgen's decisions with respect to the timing, design and conduct of research and development activities for omecamtiv mecarbil and related compounds, including decisions to postpone or discontinue research or development activities relating to omecamtiv mecarbil and related compounds;
- Astellas' decisions with respect to the timing, design and conduct of research and development activities for reldesemtiv and other skeletal muscle activators, including our ability to reach agreement with Astellas regarding the continued development of reldesemtiv and other skeletal muscle activators, as well as Astellas' decisions with respect to its option to enter into a global collaboration for the development and commercialization of tirasemtiv;
- our ability to enter into strategic partnership agreements for any of our programs on acceptable terms and conditions or in accordance with our planned timelines;
- our ability to obtain additional financing on acceptable terms, if at all;
- our receipt of funds and access to other resources under our current or future strategic alliances;
- difficulties or delays in the development, testing, manufacturing or commercialization of our drug candidates or slower than anticipated patient enrollment, in our or partners' clinical trials, or in the manufacture and supply of clinical trial materials;
- failure by our contract research organizations, contract manufacturing organizations and other vendors to properly fulfill their obligations or otherwise perform as expected;
- results from non-clinical studies that may adversely impact the timing or the further development of our drug candidates and other compounds;
- the possibility that the FDA or foreign regulatory agencies may delay or limit our or our partners' ability to conduct clinical trials or may delay or withhold approvals for the manufacture and sale of our products;
- changing standards of care and the introduction of products by competitors or alternative therapies for the treatment of indications we target that may limit the commercial potential of our drug candidates;
- difficulties or delays in achieving market access and reimbursement for our drug candidates and the potential impacts of health care reform;
- changes in laws and regulations applicable to drug development, commercialization or reimbursement;
- the uncertainty of protection for our intellectual property, whether in the form of patents, trade secrets or otherwise;
- potential infringement or misuse by us of the intellectual property rights of third parties;
- activities and decisions of, and market conditions affecting, current and future strategic partners;

- accrual information provided by our contract research organizations, contract manufacturing organizations, and other vendors;
- potential ownership changes under Internal Revenue Code Section 382;
- the timeliness and accuracy of information filed with the SEC by third parties;
- the anticipated use of proceeds from this offering, if completed; and
- our estimates regarding the sufficiency of our cash resources and our need for additional funding.

In addition, such statements are subject to the risks and uncertainties discussed in the "Risk Factors" section of this document, and the risks and uncertainties discussed elsewhere in this prospectus supplement and the accompanying prospectus, as well as documents incorporated herein and therein by reference. Such statements speak only as of the date on which they are made, and, except as required by law, we undertake no obligation to update any forward-looking statement to reflect events or circumstances after the date on which the statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

USE OF PROCEEDS

We estimate that the net proceeds from this offering will be approximately $115.9 million, or approximately $133.4 million if the underwriters exercise in full their over-allotment option, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering, if completed, to fund:

- the continued development of and commercial readiness activities associated with *omecamtiv mecarbil*;
- the continued clinical development of CK-274 and related compounds in indications associated with hypertrophic cardiomyopathies and related diseases associated with diastolic dysfunction and cardiac fibrosis, including heart failure with preserved ejection fraction;
- the continued clinical development of *reldesemtiv* in patients with ALS and SMA, including potential Phase 3 clinical trials and other commercial readiness activities; and
- working capital and other general corporate purposes, including tenant improvement of the new facility we plan to move into in 2021, capital expenditures, debt service and retirement of debt, including existing debt outstanding under the Term Loan.

We intend to use approximately $11.6 million of the net proceeds from this offering to pay the cost of the capped call transaction as described in "Description of Capped Call Transactions."

If the underwriters exercise their over-allotment option, we expect to use a portion of the net proceeds from the sale of the additional notes to enter into an additional capped call transaction with the capped call counterparty and any remainder of the net proceeds for the reasons stated above.

Based on the planned use of proceeds described above, we believe that the net proceeds from this offering and our current cash and cash equivalents, will be sufficient to enable us to fund our operating expenses and capital expenditure requirements for the next two to three years, depending on our development activities, including potentially delaying the planned Phase 3 clinical trial of reldesemtiv in patients with ALS. We have based this estimate on assumptions that may prove to be incorrect, and we could use our available capital resources sooner than we currently expect.

Due to the uncertainties inherent in the product development process, it is difficult to estimate with certainty the exact amounts of the net proceeds from this offering that may be used for the above purposes. Our management will have broad discretion over the use of the net proceeds from this offering. The amounts and timing of our expenditures will depend upon numerous factors including the results of our research and development efforts, the timing and success of preclinical studies and any ongoing clinical trials or clinical trials we may commence in the future, the timing of regulatory submissions and the amount of cash obtained through future collaborations, if any.

The Term Loan matures on December 1, 2023 and bears interest at a rate equal to the greater of (i) 8.05% and (ii) the sum (a) the 30-day U.S. LIBOR rate on the last business day of the month that immediately precedes the month in which interest will accrue, plus (b) 6.81%. We entered into the Term Loan on May 17, 2019 and used the proceeds thereof to repay a prior term loan facility with Oxford Finance LLC and Silicon Valley Bank. See "Description of Other Indebtedness"

Pending application of the net proceeds as described above, we intend to invest the net proceeds in a variety of capital-preservation instruments, including direct or guaranteed obligations of the U.S. government, certificates of deposit and money market funds, in accordance with our investment policy.

DIVIDEND POLICY

We have never declared or paid dividends on our capital stock and do not intend to pay cash dividends on our capital stock in the foreseeable future. Additionally, any cash dividends declared or paid would require prior written consent under the terms of the Term Loan.

CAPITALIZATION

The following table presents our cash and cash equivalents and our capitalization as of September 30, 2019:

- on an actual basis; and
- on an as adjusted basis to give effect to the issuance and sale of $120,000,000 aggregate principal amount of the notes we are offering, after deducting the underwriters' discounts and commissions and our estimated offering expenses.

This table should be read in conjunction with the other information in this prospectus supplement and the accompanying prospectus and the documents that are incorporated by reference herein and therein, including our consolidated financial statements and related notes.

	As of September 30, 2019	
	Actual	As adjusted
	(In thousands, except share and per share data)	
Cash and cash equivalents(1)	$ 39,634	$ 155,534
Long-term debt:		
Term Loan(2)	$ 44,762	$ 44,762
4.00% convertible senior notes due 2026 offered in this offering(3)	—	120,000
Total long-term debt	44,762	164,762
Stockholders' equity:		
Preferred stock, $0.001 par value per share; 10,000,000 shares authorized, no shares outstanding, actual and as adjusted	—	—
Common stock, $0.001 par value per share; 163,000,000 shares authorized, 59,081,899 shares outstanding, actual and as adjusted	59	59
Additional paid-in capital(3)(4)	813,729	813,729
Accumulated other comprehensive income	719	719
Accumulated deficit	(834,376)	(834,376)
Total stockholders' equity(3)(4)	(19,869)	(19,869)
Total capitalization	$ 24,893	$ 144,893

(1) Does not reflect our expected use of approximately $11.6 million of the net proceeds from the offering of the notes to fund the cost of entering into the capped call transactions described in this prospectus supplement.

(2) Reflects reduction for unamortized issuance costs. Outstanding aggregate principal amount as of September 30, 2019 was $45.0 million.

(3) The amounts shown in the table above for the notes we are offering represent their principal amount. However, applicable accounting standards require separate accounting for the debt and equity components of convertible notes that, like the notes we are offering, can be settled partially or fully in cash upon conversion. We expect the initial carrying amount of the debt component of the notes, which will be reflected as a liability on our balance sheet, to be the fair value of a similar debt instrument that does not have a conversion feature (that is, the present value of the principal and interest payments on the notes, discounted using an interest rate equal to our cost of capital for straight, unconvertible debt), net of issuance costs attributable to the debt component. The excess of the net proceeds of the notes over this initial liability carrying amount will be deemed to be the equity component of the notes. We expect to record the amount of the equity component as an increase to additional paid-in capital in the stockholders' equity section of our balance sheet and as a debt discount on the notes for accounting purposes. This debt discount will be amortized into interest expense over the term of the notes. As a result of this amortization, the interest

expense that we expect to recognize for the notes for accounting purposes will be greater than the cash interest payments we will pay on the notes, which will result in lower reported net income or larger reported net loss. Future accounting standards may change the manner in which we reflect the notes in our financial statements.

(4) Does not reflect the capped call transactions described in this prospectus supplement. We expect the cost of entering into the capped call transactions to be reflected as a reduction to additional paid-in capital in the stockholders' equity section of our balance sheet.

The number of shares of common stock, actual and as adjusted, shown in the table above excludes the following at September 30, 2019:

- 165,424 shares of common stock issuable upon the exercise of outstanding warrants, with a weighted average exercise price of $7.25 per share;
- 7,786,764 shares of common stock issuable upon the exercise of outstanding options with a weighted-average exercise price of $8.59 per share;
- 866,625 shares of common stock reserved for the vesting of outstanding restricted and performance stock units;
- 4,534,814 shares reserved for future issuance under our stock option plans and employee stock purchase plans; and
- 16,676,735 shares of common stock reserved for issuance upon conversion of the notes we are selling in this offering.

The number of shares of our common stock to be outstanding immediately after this offering as shown above does not include the up to $48.8 million of shares of our common stock that remained available for sale as of September 30, 2019 under our Controlled Equity Offering℠ Sales Agreement, or the Sales Agreement, that we entered into with Cantor Fitzgerald & Co. as of March 6, 2019. Between September 30, 2019 and the date of this prospectus supplement, no shares were sold under the Sales Agreement.

DESCRIPTION OF NOTES

We will issue the notes under an indenture and a supplemental indenture (together, the "indenture"), each between us and U.S. Bank National Association, as trustee (the "trustee"), and to be dated as of the initial closing date of this offering.

The following is a summary of certain provisions of the notes and the indenture. It is only a summary and is not complete. We qualify this summary by referring you to the indenture and the notes, because they, and not this summary, define your rights as a holder of the notes. We will provide you with a copy of the indenture, which includes the form of the notes, as provided under the caption "Where You Can Find Additional Information."

In addition, the indenture and the notes will be deemed to include certain terms that are made a part of the indenture and the notes pursuant to the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act").

Certain terms used in this summary are defined below under the caption "—Definitions." Certain other terms used in this summary are defined in the indenture.

This "Description of Notes" section supplements and, to the extent inconsistent therewith, supersedes the information in the accompanying prospectus under the caption "Description of Debt Securities."

References to "we," "us" and "our" in this section refer to Cytokinetics, Incorporated only and not to any of its subsidiaries. References to any "note" in this section refer to any authorized denomination of a note, unless the context requires otherwise.

Generally

The notes will:

- be our senior, unsecured obligations;
- initially be limited to an aggregate principal amount of $120,000,000 (or $138,000,000, if the underwriters fully exercise their option to purchase additional notes, solely to cover over-allotments);
- bear interest from, and including, November 13, 2019, at an annual rate of 4.00%, payable semi-annually in arrears on May 15 and November 15 of each year, beginning on May 15, 2020;
- bear special interest in the circumstances described below under the caption "—Events of Default—Special Interest as Sole Remedy for Certain Reporting Defaults";
- mature on November 15, 2026, unless earlier repurchased, redeemed or converted;
- be redeemable, in whole or in part, at our option, on or after November 20, 2023 and, in the case of any partial redemption, on or before the 60th scheduled trading day before the maturity date, in the circumstances described below under the caption "—Optional Redemption";
- be subject to repurchase by us at the noteholders' option if a "fundamental change" (as defined below under the caption "—Definitions") occurs, at a cash repurchase price equal to the principal amount of the notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date (subject to the right of noteholders on a record date to receive the related interest payment), as described, and subject to the limited exception set forth, below under the caption "—Fundamental Change Permits Noteholders to Require Us to Repurchase Notes";
- be convertible, at the noteholders' option, into cash, shares of our common stock or a combination of cash and shares of our common stock (together with cash in lieu of any fractional share, if applicable), at our election, based on an initial conversion rate of 94.7811 shares per $1,000 principal amount of notes (which represents an initial conversion price of approximately $10.55 per share), under the conditions and subject to the adjustments described below under the caption "—Conversion Rights";

- be issued in principal amount denominations of $1,000 or any integral multiple of $1,000 in excess thereof, which we refer to as an "authorized denomination"; and
- initially be represented by one or more registered notes in global form, but may, in certain circumstances, be exchanged for notes in definitive form, as described below under the caption "—Book Entry, Settlement and Clearance."

The indenture will not contain any financial covenants and will not limit us or our subsidiaries from incurring additional indebtedness, paying dividends or issuing or repurchasing any securities. Except to the extent described below under the captions "—Conversion Rights—Increase in Conversion Rate in Connection with a Make-Whole Fundamental Change," "—Fundamental Change Permits Noteholders to Require Us to Repurchase Notes" and "—Consolidation, Merger and Asset Sale," the indenture will not contain any provisions designed to protect noteholders upon a highly leveraged transaction involving us or a decline in our credit rating as a result of a recapitalization, takeover, highly leveraged transaction or other restructuring involving us.

Without the consent of any noteholder, we may issue additional notes under the indenture with the same terms as the notes we are offering (except for certain differences, such as the date as of which interest begins to accrue and the first interest payment date for such additional notes). However, such additional notes must be identified by a separate CUSIP number or by no CUSIP number if they are not fungible, for federal income tax or federal securities laws purposes, with other notes we issue under the indenture.

We do not intend to list the notes on any securities exchange or include them in any automated inter-dealer quotation system.

Absent manifest error, a person in whose name a note is registered on the registrar's books will be considered to be the holder of that note for all purposes, and only registered noteholders (which, in the case of notes held through DTC, will initially be DTC's nominee, Cede & Co.) will have rights under the indenture as noteholders.

Subject to applicable law, we or our subsidiaries may directly or indirectly repurchase notes in the open market or otherwise, whether through private or public tender or exchange offers, cash-settled swaps or other cash-settled derivatives. The indenture requires us to promptly deliver to the trustee for cancellation all notes that we or our subsidiaries have purchased or otherwise acquired.

Payments on the Notes

For purposes of the notes, the description below under this section titled "—Payments on the Notes" supersedes the information in the accompanying prospectus under the caption "Description of Debt Securities—Payment and Paying Agents."

We will pay (or cause the paying agent to pay) the principal of, and interest on, any global note by wire transfer of immediately available funds. We will pay (or cause the paying agent to pay) the principal of, and interest on, any certificated note as follows:

- if the principal amount of such note is at least $5.0 million (or such lower amount as we may choose in our sole and absolute discretion) and the holder of such note entitled to such payment has delivered to the paying agent or the trustee, no later than the time set forth below, a written request to receive payment by wire transfer to an account of such holder within the United States, by wire transfer of immediately available funds to such account; and
- in all other cases, by check mailed to the address of such holder set forth in the note register.

To be timely, a written request referred to in the first bullet point above must be delivered no later than the "close of business" (as defined below under the caption "—Definitions") on the following date: (i) with respect

to the payment of any interest due on an interest payment date, the immediately preceding record date; and (ii) with respect to any other payment, the date that is 15 calendar days immediately before the date such payment is due.

If the due date for a payment on a note is not a "business day" (as defined below under the caption "—Definitions"), then such payment may be made on the immediately following business day and no interest will accrue on such payment as a result of the related delay. Solely for purposes of the immediately preceding sentence, a day on which the applicable place of payment is authorized or required by law or executive order to close or be closed will be deemed not to be a "business day."

Registrar, Paying Agent and Conversion Agent

We will maintain one or more offices or agencies in the continental United States where notes may be presented for registration of transfer or for exchange, payment and conversion, which we refer to as the "registrar," "paying agent" and "conversion agent," respectively. We have appointed the trustee as the initial registrar, paying agent and conversion agent and its office in the United States as a place where notes may be presented for payment. However, we may change the registrar, paying agent and conversion agent, and we or any of our subsidiaries may choose to act in that capacity as well, without prior notice to the noteholders.

Transfers and Exchanges

For purposes of the notes, the description below under this section titled "—Transfers and Exchanges" supersedes the information in the accompanying prospectus under the caption "Description of Debt Securities—Form, Exchange and Transfer."

A noteholder may transfer or exchange its notes at the office of the registrar in accordance with the indenture. We, the trustee and the registrar may require the noteholder to, among other things, deliver appropriate endorsements or transfer instruments, and such certificates or other documentation or evidence as we or they may reasonably require to determine that such transfer or exchange complies with applicable securities laws. The notes and any shares issued upon conversion of the notes are subject to transfer restrictions, which are described below under the caption "Transfer Restrictions." In addition, we, the trustee and the registrar may refuse to register the transfer or exchange of any note that is subject to conversion, redemption or required repurchase.

We have appointed the trustee's office in the United States as a place where notes may be presented for registration of transfer or for exchange. However, we may change the registrar or act as the registrar ourselves without prior notice to the noteholders.

Interest

The notes will bear cash interest at an annual rate of 4.00%, payable semi-annually in arrears on May 15 and November 15 of each year, beginning on May 15, 2020, to the noteholders of record of the notes as of the close of business on the immediately preceding May 1 and November 1, respectively. Interest will accrue from, and including, the last date to which interest has been paid or duly provided for (or, if no interest has been paid or duly provided for, from, and including, the date the notes are initially issued) to, but excluding, the next interest payment date. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months.

In addition to the stated interest on the notes referred to above, special interest will accrue on the notes in the circumstances described below under the caption "—Events of Default—Special Interest as Sole Remedy for Certain Reporting Defaults." All references in this prospectus supplement to interest on the notes include any special interest payable on the notes, unless the context requires otherwise.

Ranking

The notes will be our general unsecured obligations that will:

- rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to the notes;
- rank equal in right of payment with all of our indebtedness that are not so subordinated; and
- effectively rank junior to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and
- rank structurally junior to all indebtedness and other liabilities of our subsidiaries (including trade payables, but excluding intercompany obligations and liabilities of a type not required to be reflected on a balance sheet of such subsidiaries in accordance with GAAP).

The indenture will not prohibit us from incurring additional indebtedness, including secured indebtedness, which would be effectively senior to the notes to the extent of the value of the collateral securing that indebtedness, or indebtedness that would rank equal in right of payment with the notes. The indenture will also not prohibit our subsidiaries from incurring any additional indebtedness or other liabilities that would be structurally senior to our obligations under the notes.

In the event of our bankruptcy, liquidation, reorganization or other winding up, our assets that secure any indebtedness will not be available to make payments under the notes unless all of that indebtedness is first paid in full. We advise you that there may not be sufficient assets remaining to pay amounts due on any or all the notes then outstanding. In the event of the bankruptcy, liquidation, reorganization or other winding up of any of our subsidiaries, we, as a common equity holder of that subsidiary, and, therefore, the noteholders, will rank behind that subsidiary's creditors, including that subsidiary's trade creditors, and (to the extent we are not a holder thereof) that subsidiary's preferred equity holders. Even if we were a creditor of any of our subsidiaries, our rights as a creditor would be effectively subordinated to any security interest of others in the assets of that subsidiary, to the extent of the value of those assets, and would be subordinated to any indebtedness of that subsidiary that is senior in right of payment to that held by us.

Our subsidiaries will have no obligations under the notes. The ability of our subsidiaries to pay dividends or make other payments to us is restricted by, among other things, corporate and other laws and by agreements to which our subsidiaries may become a party. Accordingly, we may be unable to gain access to the cash flow or assets of our subsidiaries to enable us to make payments on the notes.

As of September 30, 2019, we had $45 million aggregate principal amount of indebtedness, all of which was senior secured indebtedness under the Term Loan. After giving effect to the issuance of the notes (assuming no exercise of the underwriters' over-allotment option), our total consolidated indebtedness for borrowed money would have been approximately $165 million in principal amount.

Optional Redemption

We may not redeem the notes at our option at any time before November 20, 2023. Subject to the terms of the indenture, we have the right, at our election, to redeem all, or any portion in an authorized denomination, of the notes, at any time and from time to time, on a redemption date occurring on or after November 20, 2023 and, in the case of any partial redemption, on or before the 60th "scheduled trading day" (as defined below under the caption "—Definitions") immediately before the maturity date, for cash, but only if the "last reported sale price" (as defined below under the caption "—Definitions") per share of common stock exceeds 130% of the "conversion price" (as defined below under the caption "—Definitions") on (i) each of at least 20 "trading days" (as defined below under the caption "—Definitions"), whether or not consecutive, during the 30 consecutive trading days ending on, and including, the trading day immediately before the date we send the related

redemption notice; and (ii) the trading day immediately before the date we send such notice. In addition, calling any note for redemption will constitute a "make-whole fundamental change" (as defined below under the caption "—Definitions") with respect to that note, in which case the conversion rate applicable to the conversion of that note will be increased in certain circumstances if the conversion date for such note occurs during the period from, and including, the date the Company gives the related redemption notice to, and including, the business day immediately before the related redemption date. If we elect to redeem less than all of the outstanding notes, then the redemption will not constitute a make-whole fundamental change with respect to the notes not called for redemption, and holders of the notes not called for redemption will not be entitled to an increased conversion rate for such notes as described above on account of the redemption, except to the limited extent described below under the caption "—Conversion Rights—When the Notes May Be Converted—Conversion upon Redemption."

The redemption date will be a business day of our choosing that is no more than 85, nor less than 65, scheduled trading days after the date we send the related redemption notice, as described below.

The redemption price for any note called for redemption will be the principal amount of such note plus accrued and unpaid interest on such note to, but excluding, the redemption date. However, if the redemption date is after a regular record date and on or before the next interest payment date, then (i) the holder of such note at the close of business on such regular record date will be entitled, notwithstanding such redemption, to receive, on or, at our election, before such interest payment date, the unpaid interest that would have accrued on such note to, but excluding, such interest payment date; and (ii) the redemption price will not include accrued and unpaid interest on such note to, but excluding, such redemption date.

We will send to each noteholder notice of the redemption containing certain information set forth in the indenture, including the redemption price and the redemption date.

Notes called for redemption must be delivered to the paying agent (in the case of certificated notes) or the "depositary procedures" (as defined below under the caption "—Definitions") must be complied with (in the case of global notes) for the holder of those notes to be entitled to receive the redemption price.

If only a portion of a note is subject to redemption and that note is converted in part, then the converted portion of that note will be deemed to be from the portion of that note that was subject to redemption.

Notwithstanding anything to the contrary above, we may not redeem any notes if the principal amount of the notes has been accelerated (other than as a result of a failure to make the payment of the related redemption price and any related interest described above on the redemption date) and such acceleration has not been rescinded on or before the redemption date.

Conversion Rights

Generally

The notes (or any portion of a note in an authorized denomination) will be convertible in the circumstances described below, at the noteholders' option, into cash, shares of our common stock or a combination of cash and shares of our common stock (together with cash in lieu of any fractional share, if applicable), at our election, based on an initial conversion rate of 94.7811 shares per $1,000 principal amount of notes (which represents an initial conversion price of approximately $10.55 per share).

Noteholders may convert their notes only in the circumstances described below under the caption "—When the Notes May Be Converted."

Treatment of Interest upon Conversion

We will not adjust the conversion rate to account for any accrued and unpaid interest on any note being converted, and, except as described below, our delivery of the consideration due in respect of the conversion will

be deemed to fully satisfy and discharge our obligation to pay the principal of, and accrued and unpaid interest, if any, on, such note. As a result, except as described below, any accrued and unpaid interest on a converted note will be deemed to be paid in full rather than cancelled, extinguished or forfeited. In addition, if the consideration due upon conversion consists of both cash and shares of our common stock, then accrued and unpaid interest that is deemed to be paid therewith will be deemed to be paid first out of such cash.

Notwithstanding anything to the contrary above, if the conversion date of a note is after a regular record date and before the next interest payment date, then:

- the holder of such note at the close of business on such regular record date will be entitled, notwithstanding such conversion, to receive, on or, at our election, before such interest payment date, the unpaid interest that would have accrued on such note to, but excluding, such interest payment date; and
- the noteholder surrendering such note for conversion must deliver, at the time it surrenders such note, an amount of cash equal to the amount of such interest.

However, such noteholder need not deliver such cash:

- if we have specified a redemption date that is after such regular record date and on or before the business day immediately after such interest payment date;
- if such conversion date occurs after the regular record date immediately before the maturity date;
- if we have specified a "fundamental change repurchase date" (as defined below under the caption "—Fundamental Change Permits Noteholders to Require Us to Repurchase Notes") that is after such regular record date and on or before the business day immediately after such interest payment date; or
- to the extent of any overdue interest or interest that has accrued on any overdue interest.

Accordingly, for the avoidance of doubt, all noteholders as of the close of business on the regular record date immediately before the maturity date will receive the full interest payment that would have been due on the maturity date regardless of whether their notes have been converted after such regular record date.

When the Notes May Be Converted

Noteholders may convert their notes only in the circumstances set forth below. However, in no event may notes be converted after the close of business on the scheduled trading day immediately before the maturity date.

Conversion upon Satisfaction of Common Stock Sale Price Condition

Prior to the close of business on the business day immediately preceding July 15, 2026, a noteholder may convert its notes during any calendar quarter commencing after the calendar quarter ending on March 31, 2020 (and only during such calendar quarter), if the last reported sale price per share of our common stock for each of at least 20 trading days, whether or not consecutive, during the period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter exceeds 130% of the conversion price on the applicable trading day.

Conversion upon Satisfaction of Note Trading Price Condition

Prior to the close of business on the business day immediately preceding July 15, 2026, a noteholder may convert its notes during the five consecutive business days immediately after any 10 consecutive trading day period (such 10 consecutive trading day period, the "measurement period") if the "trading price" (as defined below under the caption "—Definitions") per $1,000 principal amount of notes, as determined following a request by a noteholder in accordance with the procedures described below, for each trading day of the

measurement period was less than 98% of the product of the last reported sale price per share of our common stock on such trading day and the conversion rate on such trading day. We refer to this condition as the "trading price condition."

The trading price will be determined by the bid solicitation agent as described below and the definition of "trading price." The bid solicitation agent (if not us) will have no obligation to determine the trading price of the notes unless we have requested such determination, and we will have no obligation to make such request (or seek bids ourselves) unless a noteholder of at least $5.0 million aggregate principal amount of notes (or such lesser principal amount as may be then outstanding) provides us with reasonable evidence that the trading price per $1,000 principal amount of notes would be less than 98% of the product of the last reported sale price per share of our common stock and the conversion rate. If such a noteholder provides such evidence, then we will instruct the bid solicitation agent to (or, if we are acting as the bid solicitation agent, we will) determine the trading price of the notes beginning on the next trading day and on each successive trading day until the trading price per $1,000 principal amount of notes is greater than or equal to 98% of the product of the last reported sale price per share of our common stock on such trading day and the conversion rate on such trading day. If the trading price condition has been met as described above, then we will notify the noteholders and the trustee of the same, and each of the noteholders and the trustee will be entitled to rely conclusively upon the accuracy of such notice and any calculations therein without independent verification. If, on any trading day after the trading price condition has been met as described above, the trading price per $1,000 principal amount of notes is greater than or equal to 98% of the product of the last reported sale price per share of our common stock on such trading day and the conversion rate on such trading day, then we will notify the noteholders and the trustee of the same, and, thereafter, neither we nor the bid solicitation agent will be required to solicit bids again until another noteholder request is made as described above.

We will act as the initial bid solicitation agent. However, we may change the bid solicitation agent, and we may appoint any of our subsidiaries to act in that capacity as well, without prior notice to the noteholders.

Conversion upon Specified Corporate Events

Certain Distributions

If, prior to the close of business on the business day immediately preceding July 15, 2026, we elect to:

- distribute, to all or substantially all holders of our common stock, any rights, options or warrants (other than rights distributed pursuant to a stockholder rights plan, so long as such rights have not separated from our common stock and are not exercisable until the occurrence of a triggering event, except that such rights will be deemed to be distributed under this bullet point upon their separation from our common stock or upon the occurrence of such triggering event) entitling them, for a period of not more than 60 calendar days after the record date of such distribution, to subscribe for or purchase shares of our common stock at a price per share that is less than the average of the last reported sale prices per share of our common stock for the 10 consecutive trading days ending on, and including, the trading day immediately before the date such distribution is announced (determined in accordance with the provisions described in the third paragraph of clause (2) under the heading "—Conversion Rate Adjustments—Generally" below); or
- distribute, to all or substantially all holders of our common stock, assets or securities of ours or rights to purchase our securities, which distribution per share of our common stock has a value, as reasonably determined by us in good faith, exceeding 10% of the last reported sale price per share of our common stock on the trading day immediately before the date such distribution is announced,

then, in either case, we will send notice of such distribution, and of the related right to convert notes, to noteholders and the trustee at least 65 scheduled trading days before the "ex-dividend date" (as defined below under the caption "—Definitions") for such distribution (or, if later in the case of any such separation of rights

issued pursuant to a stockholder rights plan or the occurrence of any such triggering event under a stockholder rights plan, as soon as reasonably practicable after we become aware of that such separation or triggering event has occurred or will occur). Once we have sent such notice, noteholders may convert their notes at any time until the earlier of the close of business on the business day immediately before such ex-dividend date and our announcement that such distribution will not take place.

Noteholders may not convert their notes pursuant to the provision described in the preceding paragraph on account of any distribution if each noteholder participates, at the same time and upon the same terms as holders of our common stock and solely as a result of holding notes, in such distribution without having to convert its notes as if such noteholder held a number of shares of common stock equal to the conversion rate in effect on the record date for such distribution, *multiplied by* the principal amount (expressed in thousands) of notes held by such noteholder as of such record date.

Certain Corporate Events

If, prior to the close of business on the business day immediately preceding July 15, 2026, a fundamental change, "make-whole fundamental change" (other than a make-whole fundamental change pursuant to clause (ii) of the definition thereof) or "common stock change event" (as defined below under the caption "—Effect of Common Stock Change Event") (other than a common stock change event that is solely for the purpose of changing our jurisdiction of incorporation and that (x) does not constitute a fundamental change or a make-whole fundamental change and (y) results in a reclassification, conversion or exchange of outstanding shares of our common stock solely into shares of common stock of the surviving entity and such common stock becomes the "reference property" (as defined below under the caption "—Effect of Common Stock Change Event") for the notes) occurs, then, in each case, noteholders may convert their notes at any time from, and including, the effective date of such transaction or event to, and including, the 35th trading day after such effective date (or, if such transaction or event also constitutes a fundamental change (other than an "exempted fundamental change," as defined below under the caption "—Fundamental Change Permits Noteholders to Require Us to Repurchase Notes—No Repurchase Right in Certain Circumstances"), to, and including, the business day immediately before the related fundamental change repurchase date). No later than the second business day after the effective date of any fundamental change, make-whole fundamental change (other than a make-whole fundamental change pursuant to clause (ii) of the definition thereof) or common stock change event that occurs before the maturity date, we will send notice to the noteholders and the trustee of such transaction or event, such effective date and, if applicable, the related right to convert notes.

Conversion upon Redemption

If we call any note for redemption, then the holder of such note may convert such note at any time before the close of business on the business day immediately before the related redemption date (or, if we fail to pay the redemption price due on such redemption date in full, at any time until such time as we pay such redemption price in full).

If we elect to redeem less than all of the outstanding notes, and the holder of any note, or any owner of a beneficial interest in any global note, is reasonably not able to determine, before the close of business on the 62nd scheduled trading day immediately before the relevant redemption date, whether such note or beneficial interest, as applicable, is to be redeemed pursuant to such redemption, then such holder or owner, as applicable, will be entitled to convert such note or beneficial interest, as applicable, at any time before the close of business on the business day immediately before such redemption date, and each such conversion will be deemed to be of a note called for redemption for purposes of the provisions described in this "—Conversion upon Redemption" section, the redemption provisions described above under the caption "—Optional Redemption" and the provisions described below under the caption "—Increase in Conversion Rate in Connection with a Make-Whole Fundamental Change."

Conversions During Free Convertibility Period

A noteholder may convert its notes at any time from, and including, July 15, 2026 until the close of business on the scheduled trading day immediately before the maturity date.

Conversion Procedures

To convert a beneficial interest in a global note, the owner of the beneficial interest must:

- comply with the depositary procedures for converting the beneficial interest (at which time such conversion will become irrevocable);
- if applicable, pay any interest payable on the next interest payment date, as described above under the caption "—Treatment of Interest upon Conversion"; and
- if applicable, pay any documentary or other taxes as described below.

To convert all or a portion of a physical note, the holder of such note must:

- complete, manually sign and deliver to the conversion agent the conversion notice attached to such note or a facsimile of such conversion notice;
- deliver such note to the conversion agent (at which time such conversion will become irrevocable);
- furnish any endorsements and transfer documents that we or the conversion agent may require;
- if applicable, pay any interest payable on the next interest payment date, as described above under the caption "—Treatment of Interest upon Conversion"; and
- if applicable, pay any documentary or other taxes as described below.

Notes may be surrendered for conversion only after the "open of business" (as defined below under the caption "—Definitions") and before the close of business on a day that is a business day.

We will pay any documentary, stamp or similar issue or transfer tax or duty due on the issue of any shares of our common stock upon conversion, except any tax or duty that is due because the converting noteholder requests those shares to be registered in a name other than the noteholder's name.

We refer to the first business day on which the requirements described above to convert a note are satisfied as the "conversion date."

If a noteholder has validly delivered a "fundamental change repurchase notice" (as defined below under the caption "—Fundamental Change Permits Noteholders to Require Us to Repurchase Notes") with respect to a note, then such note may not be converted, except to the extent such notice is withdrawn in accordance with the procedures described below.

Settlement upon Conversion

Generally

Upon conversion, we may choose to pay or deliver, as applicable, either cash ("cash settlement"), shares of our common stock ("physical settlement") or a combination of cash and shares of our common stock ("combination settlement"), as described below. We refer to each of these settlement methods as a "settlement method." If cash settlement or combination settlement applies to a conversion, then the consideration due will be determined over an "observation period" (as defined below under the caption "—Definitions") consisting of 60 "VWAP trading days" (as defined below under the caption "—Definitions").

Settlement Method

We will have the right, as described below, to elect the settlement method applicable to the conversion of any notes. Except as described below, we must use the same settlement method for all conversions with a conversion date that occurs on the same day, but we will not be obligated to use the same settlement method for conversions with conversion dates that occur on different days. All conversions with a conversion date that occurs on or after July 15, 2026 will be settled using the same settlement method, and we will send notice of such settlement method to noteholders and the conversion agent no later than the close of business on the scheduled trading day immediately before July 15, 2026. If we elect a settlement method for a conversion with a conversion date that occurs before July 15, 2026, then we will send notice of such settlement method to the converting noteholder and the conversion agent no later than the close of business on the business day immediately after the conversion date. However, notwithstanding anything to the contrary above, if we call any notes for redemption, then (i) we will specify in the related redemption notice the settlement method that will apply to all conversions with a conversion date that occurs on or after the date we send such redemption notice and on or before the business day immediately before the related redemption date; and (ii) if the related redemption date is on or after July 15, 2026, then such settlement method must be the same settlement method that applies to all conversions with a conversion date that occurs on or after July 15, 2026.

If we do not timely elect a settlement method with respect to any conversion, then we will be deemed to have elected the "default settlement method" (as defined below). If we timely elect combination settlement with respect to a conversion but do not timely notify the converting noteholder of the applicable "specified dollar amount" (as defined below under the caption "—Definitions"), then the specified dollar amount for such conversion will be deemed to be $1,000 per $1,000 principal amount of notes. For the avoidance of doubt, our failure to timely elect a settlement method or specify the applicable specified dollar amount will not constitute a default under the indenture. We currently intend to settle conversions through combination settlement with a specified dollar amount of $1,000 per $1,000 principal amount of notes.

The "default settlement method" will initially be combination settlement with a specified dollar amount of $1,000 per $1,000 principal amount of notes. However, we may, from time to time, change the default settlement method by sending notice of the new default settlement method to the noteholders. In addition, we may, by notice to the noteholders, irrevocably fix the settlement method, to any settlement method that we are then permitted to elect, that will apply to all note conversions with a conversion date that is on or after the date we send such notice. For the avoidance of doubt, such an irrevocable election, if made, will be effective without the need to amend the indenture or the notes, including pursuant to the provisions described in the seventh bullet point of the fourth paragraph under the caption "—Modification and Amendment" below. However, we may nonetheless choose to execute such an amendment at our option.

Consideration Due upon Conversion

The consideration due upon conversion of each $1,000 principal amount of a note will be as follows:

- if physical settlement applies, a number of shares of our common stock equal to the conversion rate in effect on the conversion date for such conversion;
- if cash settlement applies, cash in an amount equal to the sum of the "daily conversion values" (as defined below under the caption "—Definitions") for each VWAP trading day in the observation period for such conversion; or
- if combination settlement applies, (i) a number of shares of our common stock equal to the sum of the "daily share amounts" (as defined below under the caption "—Definitions") for each VWAP trading day in the observation period for such conversion; and (ii) an amount of cash equal to the sum of the "daily cash amounts" for each VWAP trading day in such observation period.

However, in lieu of delivering any fractional share of common stock otherwise due upon conversion, we will pay cash based on (i) the daily VWAP on the applicable conversion date (or, if such conversion date is not a VWAP trading day, the immediately preceding VWAP trading day), in the case of physical settlement; or (ii) the daily VWAP on the last VWAP trading day of the applicable observation period, in the case of combination settlement.

If a noteholder converts more than one note on a conversion date, then the consideration due upon such conversion will (in the case of any global note, to the extent permitted by, and practicable under, the depositary procedures) be computed based on the total principal amount of notes converted on such conversion date by that noteholder.

Delivery of the Conversion Consideration

Except as described below under the captions "—Conversion Rate Adjustments" and "—Effect of Common Stock Change Event," we will pay or deliver, as applicable, the consideration due upon conversion as follows: (i) if cash settlement or combination settlement applies, on or before the second business day immediately after the last VWAP trading day of such observation period; and (ii) if physical settlement applies, on or before the second business day immediately after such conversion date.

When Converting Noteholders Become Stockholders of Record

The person in whose name any share of common stock is issuable upon conversion of any note will be deemed to become the holder of record of that share as of the close of business on (i) the conversion date for such conversion, in the case of physical settlement; or (ii) the last VWAP trading day of the observation period for such conversion, in the case of combination settlement.

Conversion Rate Adjustments

Generally

The conversion rate will be adjusted for the events described below. However, we are not required to adjust the conversion rate for these events (other than a stock split or combination or a tender or exchange offer) if each noteholder participates, at the same time and on the same terms as holders of our common stock, and solely by virtue of being a holder of notes, in such transaction or event without having to convert such noteholder's notes and as if such noteholder held a number of shares of our common stock equal to the product of (i) the conversion rate in effect on the related record date; and (ii) the aggregate principal amount (expressed in thousands) of notes held by such noteholder on such date.

(1) *Stock Dividends, Splits and Combinations*. If we issue solely shares of our common stock as a dividend or distribution on all or substantially all shares of our common stock, or if we effect a stock split or a stock combination of our common stock (in each case excluding an issuance solely pursuant to a common stock change event, as to which the provisions described below under the caption "—Effect of Common Stock Change Event" will apply), then the conversion rate will be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{OS_1}{OS_0}$$

where:

CR_0	=	the conversion rate in effect immediately before the open of business on theex-dividend date for such dividend or distribution, or immediately before the open of business on the effective date of such stock split or stock combination, as applicable;
CR_1	=	the conversion rate in effect immediately after the open of business on suchex-dividend date or the open of business on such effective date, as applicable;
OS_0	=	the number of shares of our common stock outstanding immediately before the open of business on suchex-dividend date or effective date, as applicable, without giving effect to such dividend, distribution, stock split or stock combination; and
OS_1	=	the number of shares of our common stock outstanding immediately after giving effect to such dividend, distribution, stock split or stock combination.

Each adjustment to the conversion rate made pursuant to the preceding sentence will become effective at the time set forth in the definition of CR1 above. If any dividend, distribution, stock split or stock combination of the type described in this paragraph (1) is declared or announced, but not so paid or made, then the conversion rate will be readjusted, effective as of the date our "board of directors" (as defined below under the caption "—Definitions") determines not to pay such dividend or distribution or to effect such stock split or stock combination, to the conversion rate that would then be in effect had such dividend, distribution, stock split or stock combination not been declared or announced.

(2) *Rights, Options and Warrants.* If we distribute, to all or substantially all holders of our common stock, rights, options or warrants (other than rights issued pursuant to a stockholder rights plan, to which the provisions below under clause (3)(a) and under the caption "—Stockholder Rights Plans" will apply) entitling such holders, for a period of not more than 60 calendar days after the record date of such distribution, to subscribe for or purchase shares of our common stock at a price per share that is less than the average of the last reported sale prices per share of our common stock for the 10 consecutive trading days ending on, and including, the trading day immediately before the date such distribution is announced, then the conversion rate will be increased based on the following formula:

$$CR1 = CR0 \times \frac{OS + X}{OS + Y}$$

where:

$CR0$	=	the conversion rate in effect immediately before the open of business on theex-dividend date for such distribution;
$CR1$	=	the conversion rate in effect immediately after the open of business on suchex-dividend date;
OS	=	the number of shares of our common stock outstanding immediately before the open of business on suchex-dividend date;
X	=	the total number of shares of our common stock issuable pursuant to such rights, options or warrants; and
Y	=	a number of shares of our common stock obtained by dividing (x) the aggregate price payable to exercise such rights, options or warrants by (y) the average of the last reported sale prices per share of our common stock for the 10 consecutive trading days ending on, and including, the trading day immediately before the date such distribution is announced.

Each adjustment to the conversion rate made pursuant to the preceding sentence will become effective at the time set forth in the definition of CR1 above. To the extent that shares of our common stock are not delivered after the expiration of such rights, options or warrants (including as a result of such rights, options or warrants not being exercised), the conversion rate will be readjusted to the conversion rate that would then be in effect had the increase to the conversion rate for such distribution been made on the basis of delivery of only the number of shares of our common stock actually delivered upon exercise of such rights, option or warrants. To the extent such rights, options or warrants are not so distributed, the conversion rate will be readjusted to the conversion rate that would then be in effect had the ex-dividend date for the distribution of such rights, options or warrants not occurred.

For purposes of this paragraph (2) and the provisions described above under the caption "—When the Notes May Be Converted—Conversion upon Specified Corporate Events—Certain Distributions," in determining whether any rights, options or warrants entitle holders of our common stock to subscribe for or purchase shares of our common stock at a price per share that is less than the average of the last reported sale prices per share of our common stock for the 10 consecutive trading days ending on, and including, the trading day immediately before the date the distribution of such rights, options or warrants is announced, and in determining the aggregate price payable to exercise such rights, options or warrants, there will be taken into account any consideration we receive for such rights, options or

warrants and any amount payable on exercise thereof, with the value of such consideration, if not cash, to be determined by us in good faith.

(3) *Spin-Offs and Other Distributed Property.*

(a) *Distributions Other than Spin-Offs.* If we distribute shares of our "capital stock" (as defined below under the caption "—Definitions"), evidences of our indebtedness or other assets or property of ours, or rights, options or warrants to acquire our capital stock or other securities, to all or substantially all holders of our common stock, excluding:

- dividends, distributions, rights, options or warrants for which an adjustment to the conversion rate is required (or would be required without regard to the "deferral exception" (as defined below under the caption "—The Deferral Exception")) pursuant to paragraph (1) or (2) above;
- dividends or distributions paid exclusively in cash for which an adjustment to the conversion rate is required (or would be required without regard to the deferral exception) pursuant to paragraph (4) below;
- rights issued or otherwise distributed pursuant to a stockholder rights plan, except to the extent provided below under the caption "—Stockholder Rights Plans";
- spin-offs for which an adjustment to the conversion rate is required (or would be required without regard to the deferral exception) pursuant to paragraph (3)(b) below; and
- a distribution solely pursuant to a common stock change event, as to which the provisions described below under the caption "—Effect of Common Stock Change Event" will apply,

then the conversion rate will be increased based on the following formula:

$$CR1 = CR0 \times \frac{SP}{SP - FMV}$$

where:

$CR0$	=	the conversion rate in effect immediately before the open of business on theex-dividend date for such distribution;
$CR1$	=	the conversion rate in effect immediately after the open of business on suchex-dividend date;
SP	=	the average of the last reported sale prices per share of our common stock for the 10 consecutive trading days ending on, and including, the trading day immediately before such ex-dividend date; and
FMV	=	the fair market value (as determined by us in good faith), as of suchex-dividend date, of the shares of capital stock, evidences of indebtedness, assets, property, rights, options or warrants distributed per share of our common stock pursuant to such distribution.

Each adjustment to the conversion rate made pursuant to the preceding sentence will become effective at the time set forth in the definition of CR1 above. If FMV is equal to or greater than SP, then, in lieu of the foregoing adjustment to the conversion rate, each noteholder will receive, for each $1,000 principal amount of notes held by such noteholder on the record date for such distribution, at the same time and on the same terms as holders of our common stock, the amount and kind of shares of capital stock, evidences of indebtedness, assets, property, rights, options or warrants that such noteholder would have received if such noteholder had owned, on such record date, a number of shares of our common stock equal to the conversion rate in effect on such record date.

To the extent such distribution is not so paid or made, the conversion rate will be readjusted to the conversion rate that would then be in effect had the adjustment been made on the basis of only the distribution, if any, actually made or paid.

(b) *Spin-Offs*. If we distribute or dividend shares of capital stock of any class or series, or similar equity interests, of or relating to a "subsidiary" (as defined below under the caption "—Definitions") or other business unit of ours to all or substantially all holders of our common stock (other than solely pursuant to a common stock change event, as to which the provisions described below under the caption "—Effect of Common Stock Change Event" will apply), and such capital stock or equity interests are listed or quoted (or will be listed or quoted upon the consummation of the transaction) on a U.S. national securities exchange (a "spin-off"), then the conversion rate will be increased based on the following formula:

$$CR1 = CR0 \times \frac{FMV + SP}{SP}$$

where:

$CR0$	=	the conversion rate in effect immediately before the open of business on theex-dividend date for such spin-off;
$CR1$	=	the conversion rate in effect immediately after the open of business on suchex-dividend date;
FMV	=	the product of (x) the average of the last reported sale prices per share or unit of the capital stock or equity interests distributed in such spin-off over the 10 consecutive trading day period (the"spin-off valuation period") beginning on, and including, such ex-dividend date (such average to be determined as if references to our common stock in the definitions of "last reported sale price," "trading day" and "market disruption event" were instead references to such capital stock or equity interests); and (y) the number of shares or units of such capital stock or equity interests distributed per share of our common stock in such spin-off; and
SP	=	the average of the last reported sale prices per share of our common stock for each trading day in thespin-off valuation period.

The adjustment to the conversion rate pursuant to this paragraph (3)(b) will be calculated as of the close of business on the last trading day of the spin-off valuation period but will be given effect immediately after the open of business on theex-dividend date for the spin-off, with retroactive effect. If a note is converted and the conversion date (in the case of physical settlement) or any VWAP trading day of the applicable observation period (in the case of cash settlement or combination settlement) occurs during the spin-off valuation period, then, notwithstanding anything to the contrary, we will, if necessary, delay the settlement of such conversion until the second business day after the last day of the spin-off valuation period.

To the extent any dividend or distribution of the type described above in this paragraph (3)(b) is declared but not made or paid, the conversion rate will be readjusted to the conversion rate that would then be in effect had the adjustment been made on the basis of only the dividend or distribution, if any, actually made or paid.

(4) *Cash Dividends or Distributions*. If any cash dividend or distribution is made to all or substantially all holders of our common stock, then the conversion rate will be increased based on the following formula:

$$CR1 = CR0 \times \frac{SP}{SP - D}$$

where:

$CR0$	=	the conversion rate in effect immediately before the open of business on theex-dividend date for such dividend or distribution;

CR1 = the conversion rate in effect immediately after the open of business on suchex-dividend date for such dividend or distribution;

SP = the last reported sale price per share of our common stock on the trading day immediately before such ex-dividend date for such dividend or distribution; and

D = the cash amount distributed per share of our common stock in such dividend or distribution.

Each adjustment to the conversion rate made pursuant to the preceding sentence will become effective at the time set forth in the definition of CR1 above. If *D* is equal to or greater than *SP*, then, in lieu of the foregoing adjustment to the conversion rate, each noteholder will receive, for each $1,000 principal amount of notes held by such noteholder on the record date for such dividend or distribution, at the same time and on the same terms as holders of our common stock, the amount of cash that such noteholder would have received if such noteholder had owned, on such record date, a number of shares of our common stock equal to the conversion rate in effect on such record date. To the extent such dividend or distribution is declared but not made or paid, the conversion rate will be readjusted to the conversion rate that would then be in effect had the adjustment been made on the basis of only the dividend or distribution, if any, actually made or paid.

(5) *Tender Offers or Exchange Offers.* If we or any of our subsidiaries makes a payment in respect of a tender offer or exchange offer for shares of our common stock that is subject to the then-applicable tender offer rules under the Exchange Act (other than an odd-lot tender offer that satisfies the requirements of Rule 13e-4(h)(5), or any successor rule), and the value (determined as of the expiration time by us in good faith) of the cash and other consideration paid per share of our common stock in such tender or exchange offer exceeds the average (such average, the "reference price") of the last reported sale prices per share of our common stock over the 10 consecutive trading day period (the "tender/exchange offer valuation period") beginning on, and including, the trading day immediately after the last date (the "expiration date") on which tenders or exchanges may be made pursuant to such tender or exchange offer (as it may be amended), then the conversion rate will be increased based on the following formula:

$$CR1 = CR0 \times \frac{AC + (SP \times OS1)}{OS0 \times SP}$$

where:

CR0 = the conversion rate in effect immediately before the time (the "expiration time") such tender or exchange offer expires;

CR1 = the conversion rate in effect immediately after the expiration time;

AC = the aggregate value (determined as of the expiration time by us in good faith) of all cash and other consideration paid or payable for shares of our common stock purchased or exchanged in such tender or exchange offer;

OS0 = the number of shares of our common stock outstanding immediately before the expiration time (prior to giving effect to the purchase of all shares of our common stock accepted for purchase or exchange in such tender or exchange offer);

OS1 = the number of shares of our common stock outstanding immediately after the expiration time (after giving effect to the purchase of all shares of our common stock accepted for purchase or exchange in such tender or exchange offer); and

SP = the reference price per share of our common stock.

provided, *however*, that the conversion rate will in no event be adjusted down pursuant to the provisions described in this paragraph (5), except to the extent provided in the immediately following

paragraph. The adjustment to the conversion rate pursuant to this paragraph (5) will be calculated as of the close of business on the last trading day of the tender/exchange offer valuation period but will be given effect immediately after the expiration time, with retroactive effect. If a note is converted and the conversion date (in the case of physical settlement) or any VWAP trading day of the applicable observation period (in the case of cash settlement or combination settlement) occurs on the expiration date or during the tender/exchange offer valuation period, then, notwithstanding anything to the contrary, we will, if necessary, delay the settlement of such conversion until the second business day after the last day of the tender/exchange offer valuation period.

To the extent such tender or exchange offer is announced but not consummated (including as a result of being precluded from consummating such tender or exchange offer under applicable law), or any purchases or exchanges of shares of common stock in such tender or exchange offer are rescinded, the conversion rate will be readjusted to the conversion rate that would then be in effect had the adjustment been made on the basis of only the purchases or exchanges of shares of common stock, if any, actually made, and not rescinded, in such tender or exchange offer.

We will not be required to adjust the conversion rate except as described above or below under the caption "—Increase in Conversion Rate in Connection with a Make-Whole Fundamental Change." Without limiting the foregoing, we will not be required to adjust the conversion rate on account of:

- except as described above, the sale of shares of our common stock for a purchase price that is less than the market price per share of our common stock or less than the conversion price;
- the issuance of any shares of our common stock pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on our securities and the investment of additional optional amounts in shares of our common stock under any such plan;
- the issuance of any shares of our common stock or options or rights to purchase shares of our common stock pursuant to any present or future employee, director or consultant benefit or incentive plan or program (including pursuant to any "evergreen" provision thereof) of, or assumed by, us or any of our subsidiaries;
- the issuance of any shares of our common stock pursuant to any option, warrant, right or convertible, exercisable or exchangeable security of ours outstanding as of the date we first issue the notes;
- a third-party tender offer, other than a tender offer that is subject to clause (5) above;
- the repurchase of any of shares of our common stock pursuant to an open market share purchase program or other buyback transaction, including structured or derivative transactions such as accelerated share repurchase transactions or similar forward derivatives, or other buyback transaction, in each case that is not subject to clause (5) above;
- a change in the par value (or lack of par value) of our common stock; or
- accrued and unpaid interest on the notes.

The Deferral Exception

If an adjustment to the conversion rate otherwise required by the provisions described above would result in a change of less than 1% to the conversion rate, then, notwithstanding anything to the contrary described above, we may, at our election, defer and carry forward such adjustment, except that all such deferred adjustments must be given effect immediately upon the earliest to occur of the following: (i) when all such deferred adjustments would result in an aggregate change of at least 1% to the conversion rate; (ii) the conversion date of any note (in the case of physical settlement) or the first VWAP trading day of any observation period of any note (in the case of cash settlement or combination settlement); (iii) the date a fundamental change or make-whole fundamental change (other than a make-whole fundamental change pursuant to clause (ii) of the definition thereof) occurs; (iv) the date we call any notes for redemption; and (v) July 15, 2026. We refer to our ability to defer adjustments as described above as the "deferral exception."

Notice of Conversion Rate Adjustments

Upon the effectiveness of any adjustment to the conversion rate pursuant to the provisions described above under the caption "—Conversion Rate Adjustments—Generally," we will promptly send notice to the noteholders and the trustee containing (i) a brief description of the transaction or other event on account of which such adjustment was made; (ii) the conversion rate in effect immediately after such adjustment; and (iii) the effective time of such adjustment.

Voluntary Conversion Rate Increases

To the extent permitted by law and applicable stock exchange rules, we, from time to time, may (but are not required to) increase the conversion rate by any amount if (i) our board of directors determines that such increase is in our best interest or that such increase is advisable to avoid or diminish any income tax imposed on holders of our common stock or rights to purchase our common stock as a result of any dividend or distribution of shares (or rights to acquire shares) of our common stock or any similar event; (ii) such increase is in effect for a period of at least 20 business days; and (iii) such increase is irrevocable during such period.

Tax Considerations

For a discussion of the U.S. federal income tax treatment of an adjustment to the conversion rate, see "Certain Material U.S. Federal Income Tax Considerations."

Special Provisions for Adjustments that Are Not Yet Effective and Where Converting Noteholders Participate in the Relevant Transaction or Event

Notwithstanding anything to the contrary, if:

- a note is to be converted pursuant to physical settlement or combination settlement;
- the record date or effective date for any event that requires an adjustment to the conversion rate pursuant to the provisions described in clauses (1) through (4), inclusive, above under the caption "—Conversion Rate Adjustments—Generally" has occurred on or before the conversion date for such conversion (in the case of physical settlement) or on or before any VWAP trading day in the observation period for such conversion (in the case of combination settlement), but an adjustment to the conversion rate for such event has not yet become effective as of such conversion date or VWAP trading day, as applicable;
- the consideration due upon such conversion (in the case of physical settlement) or due in respect of such VWAP trading day (in the case of combination settlement) includes any whole shares of our common stock; and
- such shares are not entitled to participate in such event (because they were not held on the related record date or otherwise),

then, solely for purposes of such conversion, we will, without duplication, give effect to such adjustment on such conversion date (in the case of physical settlement) or such VWAP trading day (in the case of combination settlement), and, for the avoidance of doubt, such shares will not be entitled to participate in such event. In such case, if the date we are otherwise required to deliver the consideration due upon such conversion is before the first date on which the amount of such adjustment can be determined, then we will delay the settlement of such conversion until the second business day after such first date.

Notwithstanding anything to the contrary in the indenture or the notes, if:

- a conversion rate adjustment for any dividend or distribution becomes effective on anyex-dividend date pursuant to the provisions described above under the caption "—Conversion Rate Adjustments—Generally";

- a note is to be converted pursuant to physical settlement or combination settlement;
- the conversion date for such conversion (in the case of physical settlement) or any VWAP trading day in the observation period for such conversion (in the case of combination settlement) occurs on or after such ex-dividend date and on or before the related record date;
- the consideration due upon such conversion (in the case of physical settlement) or due with respect to such VWAP trading day (in the case of combination settlement) includes any whole shares of our common stock based on a conversion rate that is adjusted for such dividend or distribution; and
- such shares would be entitled to participate in such dividend or distribution,

then (x) such conversion rate adjustment will not be given effect for such conversion (in the case of physical settlement) or for such VWAP trading day (in the case of combination settlement); and (y) the shares of common stock, if any, issuable upon such conversion (in the case of physical settlement) or issuable with respect to such VWAP trading day (in the case of combination settlement) based on such unadjusted conversion rate will be entitled to participate in such dividend or distribution.

Stockholder Rights Plans

If any shares of our common stock are to be issued upon conversion of any note and, at the time of such conversion, we have in effect any stockholder rights plan, then the holder of that note will be entitled to receive, in addition to, and concurrently with the delivery of, the consideration otherwise due upon such conversion, the rights set forth in such stockholder rights plan, unless such rights have separated from our common stock at such time, in which case, and only in such case, the conversion rate will be adjusted pursuant to the provisions described above in paragraph (3)(a) under the caption "—Conversion Rate Adjustments—Generally" on account of such separation as if, at the time of such separation, we had made a distribution of the type referred to in such paragraph to all holders of our common stock, subject to readjustment as described above if such rights expire, terminate or are redeemed. We currently do not have a stockholder rights plan in effect.

Increase in Conversion Rate in Connection with a Make-Whole Fundamental Change

Generally

If a make-whole fundamental change occurs and the conversion date for the conversion of a note occurs during the related "make-whole fundamental change conversion period" (as defined below under the caption "—Definitions"), then, subject to the provisions described below, the conversion rate applicable to such conversion will be increased by a number of shares (the "additional shares") set forth in the table below corresponding (after interpolation as described below) to the "make-whole fundamental change effective date" (as defined below under the caption "—Definitions") and the "stock price" (as defined below under the caption "—Definitions") of such make-whole fundamental change:

	Stock Price									
Make-Whole Fundamental Change Effective Date	**$8.275**	**$9.00**	**$10.55**	**$12.00**	**$13.71**	**$20.00**	**$50.00**	**$75.00**	**$100.00**	**$150.00**
November 13, 2019	26.0648	23.2133	18.7526	15.8650	13.4099	8.4675	2.5150	1.1991	0.5585	0.0000
November 15, 2020	26.0648	22.1189	17.5431	14.6633	12.2779	7.6555	2.2874	1.1027	0.5211	0.0000
November 15, 2021	26.0648	20.8756	16.1261	13.2475	10.9446	6.7100	2.0164	0.9825	0.4701	0.0000
November 15, 2022	26.0648	19.5844	14.5412	11.6325	9.4187	5.6460	1.7082	0.8428	0.4096	0.0000
November 15, 2023	26.0648	18.2533	12.7213	9.7442	7.6411	4.4480	1.3574	0.6789	0.3372	0.0000
November 15, 2024	26.0648	16.9189	10.5318	7.4392	5.5201	3.1095	0.9602	0.4871	0.2490	0.0000
November 15, 2025	26.0648	15.6833	7.5573	4.3875	2.9329	1.6275	0.5096	0.2617	0.1374	0.0000
November 15, 2026	26.0648	15.6833	0.0057	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

If such make-whole fundamental change effective date or stock price is not set forth in the table above, then:

- if such stock price is between two stock prices in the table above or the make-whole fundamental change effective date is between two make-whole fundamental change effective dates in the table above, then the number of additional shares will be determined by a straight-line interpolation between the numbers of additional shares set forth for the higher and lower stock prices in the table above and/or the earlier and later make-whole fundamental change effective dates in the table above, based on a 365- or 366-day year, as applicable; and
- if the stock price is greater than $150.00 (subject to adjustment in the same manner as the stock prices set forth in the column headings of the table above are adjusted, as described below under the caption "—Adjustment of Stock Prices and Number of Additional Shares"), or less than $8.275 (subject to adjustment in the same manner), per share, then no additional shares will be added to the conversion rate.

Notwithstanding anything to the contrary, in no event will the conversion rate be increased to an amount that exceeds 120.8459 shares of our common stock per $1,000 principal amount of notes, which amount is subject to adjustment in the same manner as, and at the same time and for the same events for which, the conversion rate is required to be adjusted pursuant to the provisions described above under the caption "—Conversion Rate Adjustments—Generally."

For the avoidance of doubt, calling any notes for redemption will constitute a make-whole fundamental change only with respect to the notes called (or deemed called) for redemption, and not with respect to the notes not called for redemption. Accordingly, if we elect to redeem less than all of the outstanding notes, then holders of the notes not called for redemption will not be entitled to an increased conversion rate for such notes as described above on account of the redemption, except to the limited extent described above under the caption "—When the Notes May be Converted—Conversion upon Redemption."

As set forth in the definition of "make-whole fundamental change conversion period" below under the caption "—Definitions," if the conversion date for the conversion of a note occurs during a make-whole fundamental change conversion period relating to both a make-whole fundamental change resulting from our calling notes for redemption and another make-whole fundamental change, then, solely for purposes of that conversion, such conversion date will be deemed to occur only during the period relating to the make-whole fundamental change with the earlier make-whole fundamental change effective date. In that circumstance, the make-whole fundamental change with the later make-whole fundamental change effective date will be deemed not to occur for purposes of such conversion.

Adjustment of Stock Prices and Number of Additional Shares

The stock prices in the first row (*i.e.*, the column headers) of the table above will be adjusted at the same time and for the same events for which, the conversion rate is adjusted as a result of the operation of the provisions described above under the caption "—Conversion Rate Adjustments—Generally." The adjusted stock prices will equal the stock prices immediately prior to such adjustment, multiplied by a fraction, the numerator of which is the conversion rate immediately prior to the adjustment giving rise to the share price adjustment and the denominator of which is the conversion rate as so adjusted. The numbers of additional shares in the table above will be adjusted in the same manner as, and at the same time and for the same events for which, the conversion rate is adjusted pursuant to the provisions described above under the caption "—Conversion Rate Adjustments—Generally."

Notice of Make-Whole Fundamental Change

We will notify noteholders and the trustee of each make-whole fundamental change no later than the second business day after the effective date of such make-whole fundamental change (in the case of a make-whole

fundamental change pursuant to clause (i) of the definition thereof) or in the manner described above under the caption "—Optional Redemption" (in the case of a make-whole fundamental change pursuant to clause (ii) of the definition thereof).

Enforceability

Our obligation to increase the conversion rate as described above in connection with a make-whole fundamental change could be considered a penalty, in which case its enforceability would be subject to general principles of reasonableness and equitable remedies.

Effect of Common Stock Change Event

Generally

If there occurs any:

- recapitalization, reclassification or change of our common stock, other than (x) changes solely resulting from a subdivision or combination of our common stock, (y) a change only in par value or from par value to no par value or no par value to par value or (z) stock splits and stock combinations that do not involve the issuance of any other series or class of securities;
- consolidation, merger, combination or binding share exchange involving us; or
- sale, lease or other transfer of all or substantially all of the assets of us and our subsidiaries, taken as a whole, to any person,

and, as a result of which, our common stock is converted into, or is exchanged for, or represents solely the right to receive, other securities, cash or other property, or any combination of the foregoing (such an event, a "common stock change event," and such other securities, cash or property, the "reference property," and the amount and kind of reference property that a holder of one share of our common stock would be entitled to receive on account of such common stock change event (without giving effect to any arrangement not to issue or deliver a fractional portion of any security or other property), a "reference property unit"), then, notwithstanding anything to the contrary,

- from and after the effective time of such common stock change event, (i) the consideration due upon conversion of any note, and the conditions to any such conversion, will be determined in the same manner as if each reference to any number of shares of common stock in the provisions described under this "—Conversion Rights" section (or in any related definitions) were instead a reference to the same number of reference property units; (ii) for purposes of the redemption provisions described above under the caption "—Optional Redemption," each reference to any number of shares of our common stock in such provisions (or in any related definitions) will instead be deemed to be a reference to the same number of reference property units; and (iii) for purposes of the definition of "fundamental change" and "make-whole fundamental change," (x) the terms "common stock" and "common equity" will be deemed to mean the common equity (which term will be deemed to include depositary receipts or shares representing common equity), if any, forming part of such reference property; and (y) references to us will be deemed to be references to the entity that is the issuer of such common equity;
- if such reference property unit consists entirely of cash, then we will pay the cash due in respect of all conversions whose conversion date occurs on or after the effective date of such common stock change event no later than the second business day after such conversion date; and
- for these purposes, the daily VWAP of any reference property unit or portion thereof that consists of a class of common equity securities will be determined by reference to the definition of "daily VWAP," substituting, if applicable, the Bloomberg page for such class of securities in such definition; and

(ii) the daily VWAP of any reference property unit or portion thereof that does not consist of a class of common equity securities, and the last reported sale price of any reference property unit or portion thereof that does not consist of a class of securities, will be the fair value of such reference property unit or portion thereof, as applicable, determined in good faith by us (or, in the case of cash denominated in U.S. dollars, the face amount thereof).

If the reference property consists of more than a single type of consideration to be determined based in part upon any form of stockholder election, then the composition of the reference property unit will be deemed to be the weighted average of the types and amounts of consideration actually received, per share of our common stock, by the holders of our common stock. We will notify the noteholders of such weighted average as soon as practicable after such determination is made.

We will not become a party to any common stock change event unless its terms are consistent with the provisions described under this "—Effect of Common Stock Change Event" caption.

Execution of Supplemental Indenture

At or before the effective time of the common stock change event, we and the resulting, surviving or transferee person (if not us) of such common stock change event (the "successor person") will execute and deliver to the trustee a supplemental indenture that gives effect to the provisions described above and that contains such other provisions as we reasonably determine are appropriate to preserve the economic interests of the noteholders. If such reference property includes, in whole or in part, any stock or other securities, then such supplemental indenture will, to the extent applicable, provide for subsequent adjustments to the conversion rate in a manner consistent with the provisions described above. In addition, if the reference property includes, in whole or part, shares of stock or other securities or assets (other than cash or cash equivalents) of a person other than the successor person, then such other person will also execute such supplemental indenture and such supplemental indenture will contain such additional provisions we reasonably determine are appropriate to preserve the economic interests of noteholders.

Notice of Common Stock Change Event

No later than the second business day after the effective date of each common stock change event, we will notify the noteholders and the trustee of such common stock change event, including a brief description of the event, its effective date and a brief description of the anticipated change in the conversion right of the notes.

Equitable Adjustments to Prices

Whenever the indenture requires us to calculate the average of the last reported sale prices, or any function thereof, over a span of multiple days (including to calculate the stock price or an adjustment to the conversion rate), we will make proportionate adjustments to those calculations account for any adjustment to the conversion rate pursuant to paragraph (1) above under the caption "—Conversion Rights—Conversion Rate Adjustments—Generally" that becomes effective, or any event requiring such an adjustment to the conversion rate where the ex-dividend date or effective date, as applicable, of such event occurs, at any time during the period over which such average is to be calculated.

Exchange in Lieu of Conversion

When a noteholder surrenders any note for conversion, we may, at our election (an "exchange election"), direct the conversion agent to surrender, on or prior to the business day immediately following the conversion date, such note to one or more financial institutions designated by us for exchange in lieu of conversion. In order to accept any notes surrendered for conversion, the designated financial institution(s) must agree to timely pay or deliver, as the case may be, in exchange for such note, the consideration that would otherwise be due upon

conversion as described above under "—Settlement upon Conversion." To make an exchange election with respect to any note, we must, by the close of business on the business day following the relevant conversion date, notify in writing the trustee, the conversion agent (if other than the trustee) and the holder of such note and we must notify the designated financial institution(s) of the relevant deadline for delivery of the consideration due upon conversion and the type of conversion consideration to be paid or delivered, as the case may be.

Any notes exchanged by the designated financial institution(s) will remain outstanding, subject to the depositary procedures, if applicable. If any financial institution agrees to accept any notes for exchange but does not timely pay or deliver, as the case may be, the related conversion consideration, or if such designated financial institution does not accept the notes for exchange, then we will pay or deliver, as the case may be, the relevant conversion consideration, as, and at the time, required pursuant to the indenture as if we had not made the exchange election.

Our designation of any financial institution(s) to which the notes may be submitted for exchange does not require such financial institution(s) to accept any notes.

Fundamental Change Permits Noteholders to Require Us to Repurchase Notes

Generally

If a fundamental change occurs, then each noteholder will have the right (the "fundamental change repurchase right") to require us to repurchase its notes (or any portion thereof in an authorized denomination) for cash on a date (the "fundamental change repurchase date") of our choosing, which must be a business day that is no more than 35, nor less than 20, business days after the date we send the related fundamental change notice, as described below.

The repurchase price (the "fundamental change repurchase price") for a note tendered for repurchase will be the principal amount of such note plus accrued and unpaid interest on such note to, but excluding, the fundamental change repurchase date. However, if the fundamental change repurchase date is after a regular record date and on or before the next interest payment date, then (i) the holder of such note at the close of business on such regular record date will be entitled, notwithstanding such repurchase, to receive, on or, at our election, before such interest payment date, the unpaid interest that would have accrued on such note to, but excluding, such interest payment date; and (ii) the fundamental change repurchase price will not include accrued and unpaid interest on such note to, but excluding, the fundamental change repurchase date.

Notwithstanding anything to the contrary above, we may not repurchase any notes if the principal amount of the notes has been accelerated and such acceleration has not been rescinded on or before the fundamental change repurchase date (except in the case of an acceleration resulting solely from a default by us in the payment of the related fundamental change repurchase price and any related interest described above on the fundamental change repurchase date).

Notice of Fundamental Change

On or before the 20th calendar day after the occurrence of a fundamental change, we will send to each noteholder and the trustee notice of such fundamental change containing certain information set forth in the indenture, including the fundamental change repurchase date, the fundamental change repurchase price and the procedures noteholders must follow to tender their notes for repurchase.

Procedures to Exercise the Fundamental Change Repurchase Right

To exercise its fundamental change repurchase right with respect to a note, the holder thereof must deliver a notice (a "fundamental change repurchase notice") to the paying agent before the close of business on the business day immediately before the related fundamental change repurchase date (or such later time as may be required by law).

The fundamental change repurchase notice must contain certain information set forth in the indenture, including the certificate number of any physical notes to be repurchased, or must otherwise comply with the depositary procedures in the case of a global note.

A noteholder that has delivered a fundamental change repurchase notice with respect to a note may withdraw that notice by delivering a withdrawal notice to the paying agent at any time before the close of business on the business day immediately before the fundamental change repurchase date. The withdrawal notice must contain certain information set forth in the indenture, including the certificate number of any physical notes with respect to which the withdrawal notice is being delivered, or must otherwise comply with the depositary procedures in the case of a global note.

Notes to be repurchased must be delivered to the paying agent (in the case of certificated notes) or the depositary procedures must be complied with (in the case of global notes) for the holder of those notes to be entitled to receive the fundamental change repurchase price.

Repurchase by Third Party

Notwithstanding anything to the contrary described above, we will be deemed to satisfy our obligations to repurchase notes pursuant to the provisions described above if (i) one or more third parties conduct the repurchase offer and repurchase tendered notes in a manner that would have satisfied our obligations to do the same if conducted directly by us; and (ii) an owner of a beneficial interest in the notes would not receive a lesser amount (as a result of taxes, additional expenses or for any other reason) than such owner would have received had we repurchased the notes.

No Repurchase Right in Certain Circumstances

Notwithstanding anything to the contrary, we will not be required to send a fundamental change notice, or offer to repurchase or repurchase any notes, as described above, in connection with a fundamental change occurring pursuant to clause (ii)(2) (or pursuant to clause (i) that also constitutes a fundamental change occurring pursuant to clause (ii)(2)) of the definition thereof, if:

- such fundamental change constitutes a common stock change event for which all or part of the reference property consists of cash in U.S. dollars;
- immediately after such fundamental change, the notes become convertible (pursuant to the provisions described above under the captions "—Conversion Rights—Effect of Common Stock Change Event" and, if applicable, "—Conversion Rights—Increase in Conversion Rate in Connection with a Make-Whole Fundamental Change") into such cash in an amount per $1,000 principal amount of notes that equals or exceeds the fundamental change repurchase price per $1,000 principal amount of notes (calculated assuming that the same includes accrued interest to, but excluding, the latest possible fundamental change repurchase date for such fundamental change); and
- we timely send the notice relating to such fundamental change required pursuant the provisions described above under the caption "—Conversion Rights—When the Notes May Be Converted—Conversion upon Specified Corporate Events—Certain Corporate Events."

We refer to any fundamental change with respect to which, in accordance with the provision described above, we do not offer to repurchase any notes as an "exempted fundamental change."

Compliance with Securities Laws

We will comply in all material respects with all federal and state securities laws in connection with a repurchase following a fundamental change (including complying with the tender offer rules under the Exchange

Act and filing any required Schedule TO, to the extent applicable) so as to permit effecting such repurchase in the manner described above. However, to the extent that the provisions of any securities laws or regulations adopted after the date on which the notes are first issued conflict with the provisions of the indenture relating to our obligations to purchase the notes upon a fundamental change, we will comply with such applicable securities laws and regulations and will not be deemed to have breached our obligations under such provisions of the indenture by virtue of such conflict.

Consolidation, Merger and Asset Sale

For purposes of the notes, the description below under this section titled "—Consolidation, Merger and Asset Sale" supersedes the information in the accompanying prospectus under the caption "Description of Debt Securities—Consolidation, Merger or Sale."

We will not consolidate with or merge with or into, or (directly, or indirectly through one or more of our subsidiaries) sell, lease or otherwise transfer, in one transaction or a series of transactions, all or substantially all of the assets of us and our subsidiaries, taken as a whole, to another person (other than any such sale, lease or transfer to one or more of our "wholly owned subsidiaries" (as defined below under the caption "—Definitions") not effected by means of a consolidation or merger) (a "business combination event"), unless:

- the resulting, surviving or transferee person is us or, if not us, is a corporation (the "successor corporation") duly organized and existing under the laws of the United States of America, any State thereof or the District of Columbia that expressly assumes (by executing and delivering to the trustee, at or before the effective time of such business combination event, a supplemental indenture) all of our obligations under the indenture and the notes; and
- immediately after giving effect to such business combination event, no default or event of default will have occurred and be continuing.

At the effective time of a business combination event that complies with the provisions described above, the successor corporation (if not us) will succeed to, and may exercise every right and power of, us under the indenture and the notes, and, except in the case of a lease, the predecessor company will be discharged from its obligations under the indenture and the notes.

The definition of "business combination event" includes a reference to "all or substantially all" of our and our subsidiaries' assets. There is no precise, established definition of the phrase "all or substantially all" under applicable law. Accordingly, there may be uncertainty as to whether the provisions described above would apply to a sale, lease or transfer of less than all of our and our subsidiaries' assets.

Events of Default

For purposes of the notes, the description below under this section titled "—Events of Default" supersedes the information in the accompanying prospectus under the caption "Description of Debt Securities—Events of Default under the Indenture."

Generally

An "event of default" means the occurrence of any of the following:

(1) a default in the payment when due (whether at maturity, upon redemption, repurchase upon fundamental change or otherwise) of the principal of, or the redemption price or fundamental change repurchase price for, any note;

(2) a default for 30 days in the payment when due of interest on any note;

(3) our failure to deliver, when required by the indenture, a fundamental change notice or a notice pursuant to the provisions described above under the caption "Conversion Rights—When the Notes May Be Converted—Conversion upon Specified Corporate Events—Certain Corporate Events";

(4) a default in our obligation to convert a note in accordance with the indenture upon the exercise of the conversion right with respect thereto and such failure continues for five business days;

(5) a default in our obligations described above under the caption "—Consolidation, Merger and Asset Sale";

(6) a default in any of our obligations or agreements under the indenture or the notes (other than a default set forth in paragraphs (1), (2), (3), (4) or (5) above) where such default is not cured or waived within 60 days after notice to us by the trustee, or to us and the trustee by holders of at least 25% of the aggregate principal amount of notes then outstanding, which notice must specify such default, demand that it be remedied and state that such notice is a "notice of default";

(7) a default by us or any of our "significant subsidiaries" (as defined below under the caption "—Definitions") with respect to any one or more mortgages, agreements or other instruments under which there is outstanding, or by which there is secured or evidenced, any indebtedness for money borrowed of at least $12,500,000 (or its foreign currency equivalent) in the aggregate of us or any of our significant subsidiaries, whether such indebtedness exists as of the date we first issue the notes or is thereafter created, where such default:

- constitutes a failure to pay the principal of any of such indebtedness when due and payable (after the expiration of all applicable grace periods) at its stated maturity, upon required repurchase, upon declaration of acceleration or otherwise; or
- results in such indebtedness becoming or being declared due and payable before its stated maturity (an "acceleration"),

and, in either case, such acceleration has not been rescinded or annulled or such failure to pay or default is not cured or waived, or such indebtedness is not paid or discharged in full, within 60 days after written notice to us by the trustee or to us and the trustee by holders of at least 25% of the aggregate principal amount of notes then outstanding; and

(8) one or more final judgments being rendered against us or any of our significant subsidiaries for the payment of at least $12,500,000 (or its foreign currency equivalent) in the aggregate (excluding any amounts covered by insurance), where such judgment is not discharged or stayed within 60 days after (i) the date on which the right to appeal the same has expired, if no such appeal has commenced; or (ii) the date on which all rights to appeal have been extinguished; and

(9) certain events of bankruptcy, insolvency and reorganization with respect to us or any of our significant subsidiaries.

Acceleration

If an event of default described in paragraph (9) above occurs with respect to us (and not solely with respect to a significant subsidiary of ours), then the principal amount of, and all accrued and unpaid interest on, all of the notes then outstanding will immediately become due and payable without any further action or notice by any person. If an event of default (other than an event of default described in paragraph (9) above with respect to us and not solely with respect to a significant subsidiary of ours) occurs and is continuing, then, except as described below under the caption "—Special Interest as Sole Remedy for Certain Reporting Defaults," the trustee, by notice to us, or noteholders of at least 25% of the aggregate principal amount of notes then outstanding, by notice to us and the trustee, may declare the principal amount of, and all accrued and unpaid interest on, all of the notes then outstanding to become due and payable immediately.

Noteholders of a majority in aggregate principal amount of the notes then outstanding, by notice to us and the trustee, may, on behalf of all noteholders, rescind any acceleration of the notes and its consequences if

(i) such rescission would not conflict with any judgment or decree of a court of competent jurisdiction; and (ii) all existing events of default (except the non-payment of principal of, or interest on, the notes that has become due solely because of such acceleration) have been cured or waived. No such rescission will affect any subsequent default or impair any right consequent thereto.

If any portion of the amount payable on the notes upon acceleration is considered by a court to be unearned interest (through the allocation of the value of the instrument to the embedded warrant or otherwise), then the court could disallow recovery of any such portion.

Waiver of Past Defaults

An event of default pursuant to paragraph (1), (2), (4) or (6) above (that, in the case of paragraph (6) only, results from a default under any covenant that cannot be amended without the consent of each affected noteholder), and a default that could lead to such an event of default, can be waived only with the consent of each affected noteholder. Each other default or event of default may be waived, on behalf of all noteholders, by noteholders of a majority in aggregate principal amount of the notes then outstanding.

Notice of Defaults

If a default or event of default occurs, then, within 30 days after its occurrence, we will notify the trustee, setting forth what action we are taking or propose to take with respect thereto, except that we are not required to deliver such notice if such default or event of default has been cured. We must also provide the trustee, within 120 days after the end of each fiscal year, a certificate as to whether any defaults or events of default have occurred or are continuing. If a default or event of default occurs and is continuing and is known to the trustee, then the trustee must notify the noteholders of the same within 90 days after it occurs or, if it is not known to the trustee at such time, promptly (and in any event within 10 business days) after it becomes known to a responsible officer of the trustee. However, except in the case of a default or event of default in the payment of the principal of, or interest on, any note, the trustee may withhold such notice if and for so long as it in good faith determines that withholding such notice is in the interests of the noteholders.

Limitation on Suits; Absolute Rights of Noteholders

Except with respect to the rights referred to below, no noteholder may pursue any remedy with respect to the indenture or the notes, unless:

- such noteholder has previously delivered to the trustee notice that an event of default is continuing;
- noteholders of at least 25% in aggregate principal amount of the notes then outstanding deliver a written request to the trustee to pursue such remedy;
- such noteholder(s) offer and, if requested, provide to the trustee security and indemnity satisfactory to the trustee against any loss, liability or expense to the trustee that may result from the trustee's following such request;
- the trustee does not comply with such request within 60 calendar days after its receipt of such request and such offer of security or indemnity; and
- during such 60 calendar day period, noteholders of a majority in aggregate principal amount of the notes then outstanding do not deliver to the trustee a direction that is inconsistent with such request.

However, notwithstanding anything to the contrary, the right of each holder of a note to receive payment or delivery, as applicable, of the principal of, or the redemption price or fundamental change repurchase price for, or any interest on, or the consideration due upon conversion of, such note on or after the respective due dates therefor, or to bring suit for the enforcement of any such payment or delivery on or after such respective due dates, will not be impaired or affected without the consent of such holder.

Noteholders of a majority in aggregate principal amount of the notes then outstanding may direct the time, method and place of conducting any proceeding for exercising any remedy available to the trustee or exercising any trust or power conferred on it. However, the trustee may refuse to follow any direction that conflicts with law, the indenture or the notes, or that, subject to the terms of the indenture, the trustee determines may be unduly prejudicial to the rights of other noteholders or may involve the trustee in liability, unless the trustee is offered security and indemnity satisfactory to the trustee against any loss, liability or expense to the trustee that may result from the trustee's following such direction.

Special Interest as Sole Remedy for Certain Reporting Defaults

Notwithstanding anything to the contrary described above, we may elect that the sole remedy for any event of default (a "reporting event of default") pursuant to paragraph (6) above arising from our failure to comply with our obligations described below under the caption "—Exchange Act Reports" (including our obligations under Section 314(a)(1) of the Trust Indenture Act) will, for each of the first 360 calendar days on which a reporting event of default has occurred and is continuing, consist exclusively of the accrual of special interest on the notes. If we have made such an election, then (i) the notes will be subject to acceleration as described above on account of the relevant reporting event of default from, and including, the 361st calendar day on which a reporting event of default has occurred and is continuing or if we fail to pay any accrued and unpaid special interest when due; and (ii) special interest will cease to accrue on any notes from, and including, the earlier of (x) the date such event of default is cured or waived and (y) such 361st calendar day.

Any special interest that accrues on a note will be payable on the same dates and in the same manner as the stated interest on such note and will accrue at a rate per annum equal to 0.25% of the principal amount thereof for the first 180 days on which special interest accrues and, thereafter, at a rate per annum equal to 0.50% of the principal amount thereof from the 181st day to, and including, the 360th day on which special interest accrues. However, in no event will special interest accrue on any day on a note at a rate per annum that exceeds 0.50%, regardless of the number of events or circumstances giving rise to the accrual of special interest. For the avoidance of doubt, any special interest that accrues on a note will be in addition to the stated interest that accrues on such note.

To make the election to pay special interest as described above, we must provide notice of such election to noteholders before the date on which each reporting event of default first occurs. The notice will also, among other things, briefly describe the periods during which and rate at which special interest will accrue and the circumstances under which the notes will be subject to acceleration on account of such reporting event of default.

Modification and Amendment

For purposes of the notes, the description below under this section titled "—Modification and Amendment" supersedes the information in the accompanying prospectus under the caption "Description of Debt Securities—Modification of Indenture; Waiver."

We and the trustee may, with the consent of holders of a majority in aggregate principal amount of the notes then outstanding, amend or supplement the indenture or the notes or waive compliance with any provision of the indenture or the notes. However, without the consent of each affected noteholder, no amendment or supplement to the indenture or the notes, or waiver of any provision of the indenture or the notes, may:

- reduce the principal, or extend the stated maturity, of any note;
- reduce the redemption price or fundamental change repurchase price for any note or change the times at which, or the circumstances under which, the notes may or will be redeemed or repurchased by us;
- reduce the rate, or extend the time for the payment, of interest on any note;
- make any change that adversely affects the conversion rights of any note;

- impair the absolute rights of any holder of a note to receive payment or delivery, as applicable, of the principal of, or the redemption price or fundamental change repurchase price for, or any interest on, or the consideration due upon conversion of, such note on or after the respective due dates therefor, or to bring suit for the enforcement of any such payment or delivery on or after such due dates;
- change the ranking of the notes;
- make any note payable in money, or at a place of payment, other than that stated in the indenture or the note;
- reduce the amount of notes whose holders must consent to any amendment, supplement, waiver or other modification; or
- make any direct or indirect change to any amendment, supplement, waiver or modification provision of the indenture or the notes that requires the consent of each affected noteholder.

For the avoidance of doubt, pursuant to the first four bullet points above, no amendment or supplement to the indenture or the notes, or waiver of any provision of the indenture or the notes, may change the amount or type of consideration due on any note (whether on an interest payment date, redemption date, fundamental change repurchase date or the maturity date or upon conversion, or otherwise), or the date(s) or time(s) such consideration is payable or deliverable, as applicable, without the consent of each affected noteholder.

Notwithstanding anything to the contrary above, we and the trustee may amend or supplement the indenture or the notes without the consent of any noteholder to:

- cure any ambiguity or correct any omission, defect or inconsistency in the indenture or the notes;
- add guarantees with respect to our obligations under the indenture or the notes;
- secure the notes;
- add to our covenants or events of default for the benefit of noteholders or surrender any right or power conferred on us;
- provide for the assumption of our obligations under the indenture and the notes pursuant to, and in compliance with, the provisions described above under the caption "—Consolidation, Merger and Asset Sale";
- enter into supplemental indentures pursuant to, and in accordance with, the provisions described above under the caption "—Conversion Rights—Effect of Common Stock Change Event" in connection with a common stock change event;
- irrevocably elect or eliminate any settlement method or specified dollar amount;*provided*, *however*, that no such election or elimination will affect any settlement method theretofore elected (or deemed to be elected) with respect to any note pursuant to the provisions described above under the caption "—Conversion Rights—Settlement upon Conversion—Settlement Method";
- evidence or provide for the acceptance of the appointment of a successor trustee, security registrar, paying agent, bid solicitation agent or conversion agent or facilitate the administration of the trusts under the indenture by more than one trustee;
- conform the provisions of the indenture and the notes to the "Description of Notes" section of the preliminary prospectus supplement for this offering, as supplemented by the related pricing term sheet;
- provide for or confirm the issuance of additional notes pursuant to the indenture;
- increase the conversion rate as provided in the indenture;
- comply with any requirement of the SEC in connection with effecting or maintaining the qualification of the indenture or any supplemental indenture under the Trust Indenture Act, as then in effect;

- provide for any transfer restrictions that apply to any notes issued under the indenture (other than the notes to be issued in this offering) that, at the time of their original issuance, constitute "restricted securities" within the meaning of Rule 144 under the Securities Act or that are originally issued in reliance upon Regulation S under the Securities Act;
- comply with the rules of the securities depositary for the notes in a manner that does not adversely affect the rights of any holder; or
- make any other change to the indenture or the notes that does not, individually or in the aggregate with all other such changes, adversely affect the rights of noteholders, as such, in any material respect.

Exchange Act Reports

We will send to the trustee copies of all annual or quarterly reports (on Form10-K or Form 10-Q, or any respective successor forms) that we are required to file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act within 15 calendar days after the date that we are required to so file or furnish the same (after giving effect to all applicable grace periods under the Exchange Act). However, we need not send to the trustee any material for which we have received, or are seeking in good faith and have not been denied, confidential treatment by the SEC. Any report that we file with or furnish to the SEC through the EDGAR system (or any successor thereto) will be deemed to be sent to noteholders at the time such report is so filed or furnished via the EDGAR system (or such successor).

We will also comply with our other obligations under Section 314(a)(1) of the Trust Indenture Act.

Discharge

For purposes of the notes, the description below under this section titled "—Discharge" supersedes the information in the accompanying prospectus under the caption "Description of Debt Securities—Discharge."

Subject to the terms of the indenture, our obligations under the indenture with respect to the notes will be discharged if we deliver all outstanding notes to the trustee for cancellation, or if all outstanding notes have become due and payable (including upon conversion, if the consideration due upon such conversion has been determined) and we have irrevocably deposited with the trustee, or caused to be delivered to noteholders, sufficient cash or other consideration to satisfy all such amounts that have become due and payable.

Calculations

Except as otherwise provided in the indenture, we will be responsible for making all calculations called for under the indenture or the notes, including determinations of the last reported sale price, the daily conversion value, the daily cash amount, the daily share amount, accrued interest on the notes and the conversion rate. We will make all calculations in good faith, and, absent manifest error, our calculations will be final and binding on all noteholders. We will provide a schedule of our calculations to the trustee, and the trustee will promptly forward a copy of each such schedule to any noteholder upon written request.

Trustee

For purposes of the notes, the description below under this section titled "—Trustee" supersedes the information in the accompanying prospectus under the caption "Description of Debt Securities—Information Concerning the Trustee."

The trustee under the indenture is U.S. Bank National Association. The trustee assumes no responsibility for the accuracy or completeness of the information contained in this prospectus supplement or the related documents.

Notices

We will send all notices or communications to noteholders pursuant to the indenture in writing by first class mail, certified or registered, return receipt requested, or by overnight air courier guaranteeing next day delivery, to the noteholders' respective addresses shown on the register for the notes. However, in the case of global notes, we are permitted to send notices or communications to noteholders pursuant to the depositary procedures, and notices and communications that we send in this manner will be deemed to have been properly sent to such noteholders in writing.

No Personal Liability of Directors, Officers, Employees and Stockholders

No past, present or future director, officer, employee, incorporator or stockholder of ours, as such, will have any liability for any obligations of ours under the indenture or the notes or for any claim based on, in respect of, or by reason of, such obligations or their creation. By accepting any note, each noteholder will be deemed to waive and release all such liability, and such waiver and release are part of the consideration for the issuance of the notes.

Governing Law; Waiver of Jury Trial

For purposes of the notes, the description below under this section titled "—Governing Law; Waiver of Jury Trial" supersedes the information in the accompanying prospectus under the caption "Description of Debt Securities—Governing Law."

The indenture and the notes, and any claim, controversy or dispute arising under or related to the indenture or the notes, will be governed by and construed in accordance with the laws of the state of New York. The indenture will provide that we and the trustee will irrevocably waive, 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 the indenture, the notes or the transactions contemplated by the indenture or the notes.

Submission to Jurisdiction

Any legal suit, action or proceeding arising out of or based upon the indenture or the transactions contemplated by the indenture may be instituted in the federal courts of the United States of America located in the City of New York or the courts of the State of New York, in each case located in the City of New York (collectively, the "specified courts"), and each party will be deemed to irrevocably submit to the non-exclusive jurisdiction of those courts in any such suit, action or proceeding. Service of any process, summons, notice or document by mail (to the extent allowed under any applicable statute or rule of court) to any party's address as provided in the indenture will be effective service of process for any such suit, action or proceeding brought in any such court. Each of us, the trustee and each noteholder (by its acceptance of any note) will be deemed to irrevocably and unconditionally waive any objection to the laying of venue of any suit, action or other proceeding in the specified courts and to irrevocably and unconditionally waive and agree not to plead or claim any such suit, action or other proceeding has been brought in an inconvenient forum.

Definitions

"Bid solicitation agent" means the person who is required to obtain bids for the trading price in accordance with the provisions described under the caption "—Conversion Rights—When the Notes May Be Converted—Conversion upon Satisfaction of Note Trading Price Condition" and in the definition of "trading price."

"Board of directors" means our board of directors or a committee of such board duly authorized to act on behalf of such board.

"Business day" means any day other than a Saturday, a Sunday or any day on which the Federal Reserve Bank of New York is authorized or required by law or executive order to close or be closed.

"Capital stock" of any person means any and all shares of, interests in, rights to purchase, warrants or options for, participations in, or other equivalents of, in each case however designated, the equity of such person, but excluding any debt securities convertible into such equity.

"Close of business" means 5:00 p.m., New York City time.

"Conversion price" means, as of any time, an amount equal to (i) $1,000*divided by* (ii) the conversion rate in effect at such time.

"Conversion rate" initially means 94.7811 shares of our common stock per $1,000 principal amount of notes, which amount is subject to adjustment as described above under the caption "—Conversion Rights." Whenever in this prospectus supplement we refer to the conversion rate as of a particular date without setting forth a particular time on such date, such reference will be deemed to be to the conversion rate immediately after the close of business on such date.

"Daily cash amount" means, with respect to any VWAP trading day, the lesser of (i) the applicable daily maximum cash amount; and (ii) the daily conversion value for such VWAP trading day.

"Daily conversion value" means, with respect to any VWAP trading day,one-60th of the product of (i) the conversion rate on such VWAP trading day; and (ii) the daily VWAP per share of our common stock on such VWAP trading day.

"Daily maximum cash amount" means, with respect to a conversion of any note, the quotient obtained by dividing (i) the specified dollar amount applicable to such conversion by (ii) 60.

"Daily share amount" means, with respect to any VWAP trading day, the quotient obtained by dividing (i) the excess, if any, of the daily conversion value for such VWAP trading day over the applicable daily maximum cash amount by (ii) the daily VWAP for such VWAP trading day. For the avoidance of doubt, the daily share amount will be zero for such VWAP trading day if such daily conversion value does not exceed such daily maximum cash amount.

"Daily VWAP" means, for any VWAP trading day, the per share volume-weighted average price of our common stock as displayed under the heading "Bloomberg VWAP" on Bloomberg page "CYTK <EQUITY> AQR" (or, if such page is not available, its equivalent successor page) in respect of the period from the scheduled open of trading until the scheduled close of trading of the primary trading session on such VWAP trading day (or, if such volume-weighted average price is unavailable, the market value of one share of our common stock on such VWAP trading day, determined, using a volume-weighted average price method, by a nationally recognized independent investment banking firm we select, which may include any of the underwriters). The daily VWAP will be determined without regard to after-hours trading or any other trading outside of the regular trading session.

"Depositary procedures" means, with respect to any transfer, exchange or transaction involving a global note or any beneficial interest therein, the rules and procedures of the depositary applicable to such transfer, exchange or transaction.

"DTC" means The Depository Trust Company.

"Ex-dividend date" means, with respect to an issuance, dividend or distribution on our common stock, the first date on which shares of our common stock trade on the applicable exchange or in the applicable market, regular way, without the right to receive such issuance, dividend or distribution (including pursuant to due bills or similar arrangements required by the relevant stock exchange). For the avoidance of doubt, any alternative trading convention on the applicable exchange or market in respect of our common stock under a separate ticker symbol or CUSIP number will not be considered "regular way" for this purpose.

"Exchange Act" means the U.S. Securities Exchange Act of 1934, as amended.

"Fundamental change" means any of the following events:

(i) a "person" or "group" (within the meaning of Section 13(d)(3) of the Exchange Act), other than us, any of our wholly owned subsidiaries or any employee benefit plans of ours or any of our wholly owned subsidiaries, has become and files any report with the SEC that discloses that such person or group has become the direct or indirect "beneficial owner" (as defined below) of shares of our common stock representing more than 50% of the voting power of all of our then-outstanding common stock; *provided*, *however*, that, for these purposes, no "person" or "group" will be deemed to be the beneficial owner of any securities tendered pursuant to a tender or exchange offer made by or on behalf of such "person" or "group" until such tendered securities are accepted for purchase or exchange under such offer;

(ii) the consummation of: (1) any sale, lease or other transfer, in one transaction or a series of transactions, of all or substantially all of the assets of us and our subsidiaries, taken as a whole, to any person, other than one or more of our wholly owned subsidiaries; or (2) any transaction or series of related transactions in connection with which (whether by means of merger, consolidation, share exchange, combination, reclassification, recapitalization, acquisition, liquidation or otherwise) all of our common stock is exchanged for, converted into, acquired for, or constitutes solely the right to receive, other securities, cash or other property (other than changes resulting solely from a subdivision or combination, or a change in par value, of our common stock); *provided*, *however*, that any merger, consolidation, share exchange or combination of us pursuant to which the persons that directly or indirectly "beneficially owned" (as defined below) all classes of our common equity immediately before such transaction directly or indirectly "beneficially own," immediately after such transaction, more than 50% of all classes of common equity of the surviving, continuing or acquiring company or other transferee, as applicable, or the parent thereof, in substantially the same proportions vis-à-vis each other as immediately before such transaction will be deemed not to be a fundamental change pursuant to this clause (ii);

(iii) our stockholders approve any plan or proposal for our liquidation or dissolution; or

(iv) our common stock ceases to be listed or quoted on any of The New York Stock Exchange, The Nasdaq Global Market or The Nasdaq Global Select Market (or any of their respective successors);

provided, *however*, that a transaction or event described in clause (i) or (ii) above will not constitute a fundamental change if at least 90% of the consideration received or to be received by the holders of our common stock (excluding cash payments for fractional shares or pursuant to dissenters rights), in connection with such transaction or event, consists of shares of common stock listed or quoted (or depositary receipts or shares representing shares of common stock, which depositary receipts or shares are listed or quoted) on any of The New York Stock Exchange, The Nasdaq Global Market or The Nasdaq Global Select Market (or any of their respective successors), or that will be so listed when issued or exchanged in connection with such transaction or event, and such transaction or event constitutes a common stock change event whose reference property consists of such consideration. For purposes of this definition of "fundamental change" above, any transaction that constitutes a fundamental change pursuant to both clauses (i) and (ii) above (without regard to the proviso in clause (ii) above) will be deemed to occur solely pursuant to clause (ii) above (subject to such proviso).

For the purposes of this definition, whether a person is a "beneficial owner" and whether shares are "beneficially owned" will be determined in accordance with Rule 13d-3 under the Exchange Act, subject to the proviso to clause (i) above

"Holder" and "noteholder" mean a person in whose name a note is registered in the register for the notes.

"Last reported sale price" of our common stock for any trading day means the closing sale price per share (or, if no closing sale price is reported, the average of the last bid price and the last ask price per share or, if more than one in either case, the average of the average last bid prices and the average last ask prices per share) of our

common stock on such trading day as reported in composite transactions for the principal U.S. national or regional securities exchange on which our common stock is then listed. If our common stock is not listed on a U.S. national or regional securities exchange on such trading day, then the last reported sale price will be the last quoted bid price per share of our common stock on such trading day in the over-the-counter market as reported by OTC Markets Group Inc. or a similar organization. If our common stock is not so quoted on such trading day, then the last reported sale price will be the average of the mid-point of the last bid price and the last ask price per share of our common stock on such trading day from each of at least three nationally recognized independent investment banking firms we select, which may include any of the underwriters. The "last reported sale price" will be determined without regard to after-hours trading or any other trading outside of the regular trading session hours.

"Make-whole fundamental change" means (i) a fundamental change (determined after giving effect to the proviso immediately after clause (iv) of the definition thereof, but without regard to the proviso to clause (ii)(2) of such definition) or (ii) the sending of any notice of redemption pursuant to the provisions described above under the caption "—Optional Redemption"; *provided*, *however*, that the sending of any such notice of redemption will constitute a make-whole fundamental change only with respect to the notes called (or deemed to be called pursuant to the provisions described above under the caption "—When the Notes May be Converted—Conversion upon Redemption.") for redemption pursuant to such notice and not with respect to any other notes.

"Make-whole fundamental change conversion period" has the following meaning:

(i) in the case of a make-whole fundamental change pursuant to clause (i) of the definition thereof, the period from, and including, the make-whole fundamental change effective date of such make-whole fundamental change to, and including, the 35th trading day after such make-whole fundamental change effective date (or, if such make-whole fundamental change also constitutes a fundamental change (other than an exempted fundamental change), to, and including, the business day immediately before the related fundamental change repurchase date); and

(ii) in the case of a make-whole fundamental change pursuant to clause (ii) of the definition thereof, the period from, and including, the date we send the redemption notice for the related redemption to, and including, the business day immediately before the related redemption date;

provided, *however*, that if the conversion date for the conversion of a note occurs during the make-whole fundamental change conversion period for both a make-whole fundamental change occurring pursuant to clause (i) of the definition of "make-whole fundamental change" and a make-whole fundamental change occurring pursuant to clause (ii) of such definition, then, solely for purposes of such conversion, (x) such conversion date will be deemed to occur solely during the make-whole fundamental change conversion period for the make-whole fundamental change with the earlier make-whole fundamental change effective date; and (y) the make-whole fundamental change with the later make-whole fundamental change effective date will be deemed not to have occurred.

"Make-whole fundamental change effective date" means (i) with respect to a make-whole fundamental change pursuant to clause (i) of the definition thereof, the date on which such make-whole fundamental change occurs or becomes effective; and (ii) with respect to a make-whole fundamental change pursuant to clause (ii) of the definition thereof, the applicable "redemption notice date" (as defined below).

"Market disruption event" means, with respect to any date, the occurrence or existence, during theone-half hour period ending at the scheduled close of trading on such date on the principal U.S. national or regional securities exchange or other market on which our common stock is listed for trading or trades, of any material suspension or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the relevant exchange or otherwise) in our common stock or in any options contracts or futures contracts relating to our common stock.

"Maturity date" means November 15, 2026.

"Observation period" means, with respect to any note to be converted, (i) subject to clause (ii) below, if the conversion date for such note occurs on or before the 65th scheduled trading day immediately before the maturity date, the 60 consecutive VWAP trading days beginning on, and including, the third VWAP trading day immediately after such conversion date; (ii) if such conversion date occurs on or after the date we have sent a redemption notice calling such note for redemption and before the related redemption date, the 60 consecutive VWAP trading days beginning on, and including, the 61st scheduled trading day immediately before such redemption date; and (iii) subject to clause (ii) above, if such conversion date occurs after the 65th scheduled trading day immediately before the maturity date, the 60 consecutive VWAP trading days beginning on, and including, the 61st scheduled trading day immediately before the maturity date.

"Open of business" means 9:00 a.m., New York City time.

"Person" means any individual, corporation, partnership, limited liability company (or series thereof), joint venture, association, joint-stock company, trust, unincorporated organization or government or other agency or political subdivision thereof. Any division or series of a limited liability company, limited partnership or trust will constitute a separate "person."

"Redemption notice date" means, with respect to a redemption, the date on which we send the related redemption notice pursuant to the provisions described above under the caption "—Optional Redemption."

"Scheduled trading day" means any day that is scheduled to be a trading day on the principal U.S. national or regional securities exchange on which our common stock is then listed or, if our common stock is not then listed on a U.S. national or regional securities exchange, on the principal other market on which our common stock is then traded. If our common stock is not so listed or traded, then "scheduled trading day" means a business day.

"Securities Act" means the U.S. Securities Act of 1933, as amended.

"Significant subsidiary" of any person means any subsidiary of that person that constitutes, or any group of subsidiaries of that person that, in the aggregate, would constitute, a "significant subsidiary" (as defined in Rule 1-02(w) of Regulation S-X under the Exchange Act) of that person;*provided*, *however*, that, if a subsidiary meets the criteria of clause (3) of the definition of "significant subsidiary" in Rule1-02(w) but not clause (1) or (2) thereof, then such subsidiary will be deemed not to be a significant subsidiary of that person unless such subsidiary's or group's income from continuing operations before income taxes, exclusive of amounts attributable to any non-controlling interests, for the last completed fiscal year before the date of determination exceeds $20,000,000.

"Specified dollar amount" means, with respect to the conversion of a note to which combination settlement applies, the maximum cash amount per $1,000 principal amount of such note deliverable upon such conversion (excluding cash in lieu of any fractional share of common stock).

"Stock price" has the following meaning for any make-whole fundamental change: (i) if the holders of our common stock receive only cash in consideration for their shares of common stock in such make-whole fundamental change and such make-whole fundamental change is pursuant to clause (ii) of the definition of "fundamental change," then the stock price is the amount of cash paid per share of our common stock in such make-whole fundamental change; and (ii) in all other cases, the stock price is the average of the last reported sale prices per share of common stock for the five consecutive trading days ending on, and including, the trading day immediately before the make-whole fundamental change effective date of such make-whole fundamental change.

"Subsidiary" means, with respect to any person, (i) any corporation, association or other business entity (other than a partnership or limited liability company) of which more than 50% of the total voting power of the capital stock entitled (without regard to the occurrence of any contingency, but after giving effect to any voting

agreement or stockholders' agreement that effectively transfers voting power) to vote in the election of directors, managers or trustees, as applicable, of such corporation, association or other business entity is owned or controlled, directly or indirectly, by such person or one or more of the other subsidiaries of such person; and (ii) any partnership or limited liability company where (x) more than 50% of the capital accounts, distribution rights, equity and voting interests, or of the general and limited partnership interests, as applicable, of such partnership or limited liability company are owned or controlled, directly or indirectly, by such person or one or more of the other subsidiaries of such person, whether in the form of membership, general, special or limited partnership or limited liability company interests or otherwise; and (y) such person or any one or more of the other subsidiaries of such person is a controlling general partner of, or otherwise controls, such partnership or limited liability company.

"Trading day" means any day on which (i) trading in our common stock generally occurs on the principal U.S. national or regional securities exchange on which our common stock is then listed or, if our common stock is not then listed on a U.S. national or regional securities exchange, on the principal other market on which our common stock is then traded; and (ii) there is no "market disruption event" (as defined above in this "—Definitions" section). If our common stock is not so listed or traded, then "trading day" means a business day.

"Trading price" of the notes on any trading day means the average of the secondary market bid quotations, expressed as a cash amount per $1,000 principal amount of notes, obtained by the bid solicitation agent for $1,000,000 (or such lesser amount as may then be outstanding) in principal amount of notes at approximately 3:30 p.m., New York City time, on such trading day from three nationally recognized independent securities dealers we select, which may include any of the underwriters; *provided*, *however*, that, if three such bids cannot reasonably be obtained by the bid solicitation agent but two such bids are obtained, then the average of the two bids will be used, and if only one such bid can reasonably be obtained by the bid solicitation agent, then that one bid will be used. If, on any trading day, (i) the bid solicitation agent cannot reasonably obtain at least one bid for $1,000,000 (or such lesser amount as may then be outstanding) in principal amount of notes from a nationally recognized independent securities dealer; (ii) we are not acting as the bid solicitation agent and we fail to instruct the bid solicitation agent to obtain bids when required; or (iii) the bid solicitation agent fails to solicit bids when required, then, in each case, the trading price per $1,000 principal amount of notes on such trading day will be deemed to be less than 98% of the product of the last reported sale price per share of our common stock on such trading day and the conversion rate on such trading day.

"VWAP market disruption event" means, with respect to any date, (i) the failure by the principal U.S. national or regional securities exchange on which our common stock is then listed, or, if our common stock is not then listed on a U.S. national or regional securities exchange, the principal other market on which our common stock is then traded, to open for trading during its regular trading session on such date; or (ii) the occurrence or existence, for more than one half hour period in the aggregate, of any suspension or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the relevant exchange or otherwise) in our common stock or in any options, contracts or futures contracts relating to our common stock, and such suspension or limitation occurs or exists at any time before 1:00 p.m., New York City time, on such date.

"VWAP trading day" means a day on which (i) there is no VWAP market disruption event; and (ii) trading in our common stock generally occurs on the principal U.S. national or regional securities exchange on which our common stock is then listed or, if our common stock is not then listed on a U.S. national or regional securities exchange, on the principal other market on which our common stock is then traded. If our common stock is not so listed or traded, then "VWAP trading day" means a business day.

"Wholly owned subsidiary" of a person means any subsidiary of such person all of the outstanding capital stock or other ownership interests of which (other than directors' qualifying shares) are owned by such person or one or more wholly owned subsidiaries of such person.

Book Entry, Settlement and Clearance

Global Notes

The notes will be initially issued in the form of one or more notes registered in the name of Cede & Co., as nominee of DTC, without interest coupons (the "global notes"), and will be deposited with the trustee as custodian for DTC.

Only persons who have accounts with DTC ("DTC participants") or persons who hold interests through DTC participants may own beneficial interests in a global note. We expect that, under procedures established by DTC:

- upon deposit of a global note with DTC's custodian, DTC will credit portions of the principal amount of the global note to the accounts of the DTC participants designated by the underwriters; and
- ownership of beneficial interests in a global note will be shown on, and transfers of such interests will be effected only through, records maintained by DTC (with respect to interests of DTC participants) and the records of DTC participants (with respect to other owners of beneficial interests in the global note).

Book-Entry Procedures for Global Notes

All interests in a global note will be subject to the operations and procedures of DTC. Accordingly, you must allow for sufficient time in order to comply with those operations and procedures if you wish to exercise any of your rights with respect to the notes. The operations and procedures of DTC are controlled by DTC and may be changed at any time. None of us, the trustee or any of the underwriters will be responsible for those operations or procedures.

DTC has advised us that it is:

- a limited purpose trust company organized under the laws of the State of New York;
- a "banking organization" within the meaning of the New York State Banking Law;
- a member of the Federal Reserve System;
- a "clearing corporation" within the meaning of the Uniform Commercial Code; and
- a "clearing agency" registered under Section 17A of the Exchange Act.

DTC was created to hold securities for its participants and to facilitate the clearance and settlement of securities transactions between its participants through electronic book-entry changes to the accounts of its participants. DTC's participants include securities brokers and dealers (including the underwriters), banks and trust companies, clearing corporations and other organizations. Indirect access to DTC's book-entry system is also available to other "indirect participants," such as banks, brokers, dealers and trust companies, who directly or indirectly clear through or maintain a custodial relationship with a DTC participant. Purchasers of notes who are not DTC participants may beneficially own securities held by or on behalf of DTC only through DTC participants or indirect participants in DTC.

So long as DTC or its nominee is the registered owner of a global note, DTC or that nominee will be considered the sole owner or holder of the notes represented by that global note for all purposes under the indenture. Except as provided below, owners of beneficial interests in a global note:

- will not be entitled to have notes represented by the global note registered in their names;
- will not receive or be entitled to receive physical, certificated notes; and
- will not be considered the owners or holders of the notes under the indenture for any purpose.

As a result, each investor who owns a beneficial interest in a global note must rely on the procedures of DTC (and, if the investor is not a participant or an indirect participant in DTC, on the procedures of the DTC participant through whom the investor owns its interest) to exercise any rights of a noteholder under the indenture.

Payments on any global notes will be made to DTC's nominee as the registered holder of the global note. Neither we nor the trustee will have any responsibility or liability for the payment of amounts to owners of beneficial interests in a global note, for any aspect of the records relating to, or payments made on account of, those interests by DTC or for maintaining, supervising or reviewing any records of DTC relating to those interests. Payments by participants and indirect participants in DTC to the owners of beneficial interests in a global note will be governed by standing instructions and customary industry practice and will be the responsibility of those participants or indirect participants and DTC.

Transfers between participants in DTC will be effected under DTC's procedures and will be settled insame-day funds.

Certificated Notes

A global note will be exchanged, pursuant to customary procedures, for one or more physical notes only if:

- DTC notifies us or the trustee that it is unwilling or unable to continue as depositary for such global note or DTC ceases to be a "clearing agency" registered under Section 17A of the Exchange Act and, in each case, we fail to appoint a successor depositary within 90 days of such notice or cessation;
- an event of default has occurred and is continuing and we, the trustee or the registrar has received a written request from DTC, or from a holder of a beneficial interest in such global note, to exchange such global note or beneficial interest, as applicable, for one or more physical notes; or
- we, in our sole discretion, permit the exchange of any beneficial interest in such global note for one or more physical notes at the request of the owner of such beneficial interest.

DESCRIPTION OF CAPPED CALL TRANSACTIONS

In connection with this offering of notes, we are entering into one or more capped call transactions with the capped call counterparty. The capped call transactions will cover, subject to customary adjustments, the number of shares of our common stock initially underlying the notes and the strike price of the capped call transactions will initially correspond to the conversion price of the notes. However, the strike price will be subject to anti-dilution adjustments that may not match those applicable to the conversion price.

The capped call transactions are separate transactions that are entered into by us and the capped call counterparty are not part of the terms of the notes and do not affect the holders' rights under the notes. As a holder of the notes, you do not have any rights with respect to the capped call transactions. If the capped call transactions (or portions thereof) are exercised and the market value per share of our common stock, as measured under the terms of the capped call transactions at the time of exercise, is greater than the strike price of the capped call transactions but not greater than the cap price of the capped call transactions, we expect to receive from the capped call counterparty a number of shares of our common stock or, at our election (subject to certain conditions), cash, with an aggregate market value (or, in the case of cash settlement, in an amount) approximately equal to the product of such excess times the number of shares of our common stock relating to the capped call transactions (or the portions thereof) being exercised. As a result, the capped call transactions are expected to reduce the potential dilution as a result of conversion of the notes unless we elect, at our option and subject to certain condition specified under the capped call transactions, for the options to be settled in cash rather than shares of our common stock.

If, however, the market value per share of our common stock, as measured under the terms of the capped call transactions at the time of exercise, exceeds the cap price of the capped call transactions, the number of shares of our common stock or the amount of cash we expect to receive upon the exercise of the capped call transactions (or portions thereof) will be capped at a number of shares of our common stock with an aggregate market value approximately equal to (1) the excess of the cap price of the capped call transactions over the strike price of the capped call transactions times (2) the number of shares of our common stock relating to the capped call transactions (or the portions thereof) being exercised, and the dilution mitigation under the capped call transactions will be limited to such capped number of shares of our common stock we expect to receive.

Additionally, to the extent that the market value per share of our common stock exceeds the conversion price of the notes but does not exceed the strike price of the capped call transactions at any time of expiration, we will not be entitled to receive any shares of our common stock or cash under the capped call transactions upon such expiration.

In connection with establishing its initial hedge of the capped call transactions, the capped call counterparty or its affiliates expect to purchase shares of our common stock and/or enter into various derivatives with respect to our common stock concurrently with or shortly after the pricing of the notes, including with certain investors in the notes. This activity could increase (or reduce the size of any decrease in) the market price of our common stock or the notes at that time.

In addition, we expect that the capped call counterparty or its affiliates described above may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions following the pricing of the notes and prior to maturity of the notes (and are likely to do so on each exercise date of the capped call transactions, which are expected to occur during the 60 trading day period beginning on the 61st scheduled trading day prior to the maturity date of the notes, or following any termination of any portion of the capped call transaction in connection with any repurchase, redemption or early conversion of the notes). This activity could also cause or avoid an increase or decrease in the market price of our common stock or the notes, which could affect your ability to convert the notes and, to the extent the activity occurs during any observation period related to a conversion of the notes, affect the amount and value of the consideration that you will receive upon conversion of the notes.

In addition, if any such capped call transactions fail to become effective, whether or not this offering of notes is completed, the capped call counterparty or its affiliates may unwind its hedge positions with respect to our common stock, which could adversely affect the value of our common stock and, if the notes have been issued, the value of the notes.

DESCRIPTION OF OTHER INDEBTEDNESS

On May 17, 2019, we entered into a loan and security agreement by and among us, Oxford Finance LLC and Silicon Valley Bank (as amended, the "Term Loan") for $45.0 million aggregate principal amount of term loans and terminated our previous loan and security agreement dated as of October 19, 2015, as amended, with the lenders party thereto, or Original Loan Agreement. The proceeds of the Term Loan were used in part to repay in full all of the outstanding term loans under the Original Loan Agreement in an aggregate principal amount of $42.0 million. On November 6, 2019 and November 7, 2019, the Term Loan was amended to permit the issuance of the notes in this offering and the capped call transactions, among other changes.

The Term Loan bears interest at an annual rate equal to the greater of (a) 8.05% or (b) the sum of 6.81% plus the 30-day U.S. LIBOR rate. The borrowing under the Term Loan is repayable in monthly interest-only payments through December 31, 2020. The interest-only period may be extended for six or twelve months if both of the following milestones occur: (i) specified events related to the development of (a) reldesemtiv, a novel fast skeletal muscle troponin activator, in spinal muscular atrophy or amyotrophic lateral sclerosis, or (b) CK-3773274, a novel cardiac myosin inhibitor, in cardiomyopathy; and/or (ii) specified results from GALACTIC-HF, a Phase 3 trial of omecamtiv mecarbil, a novel cardiac myosin activator. The ultimate interest-only period will be followed by equal monthly payments of principal and interest to the maturity date on December 1, 2023. We will be required to make a final payment fee of 6.00% of the amounts of the Term Loan drawn payable on the earlier of (i) the prepayment of the Term Loan or (ii) the maturity of the Term Loan. We may prepay the Term Loans by paying a prepayment fee equal to (i) 3.00% of the applicable Term Loan prepaid through and including the first anniversary of the funding date, (ii) 2.00% of the applicable Term Loan prepaid after the first anniversary date and through and including the second anniversary of the funding date, and (iii) 1.00% of the applicable Term Loan prepaid after the second anniversary date and prior to the maturity date.

The loan agreement governing the Term Loan contains customary representations and warranties and customary affirmative and negative covenants applicable to us and upon effectiveness of the amendments noted above, a financial covenant to maintain either (i) a minimum market capitalization of $550 million or (ii) minimum unrestricted cash of $56.3 million. The loan agreement governing the Term Loan includes customary events of default, including but not limited to the nonpayment of principal or interest, violations of covenants and material adverse changes. Upon an event of default, the lenders under the Term Loan may, among other things, accelerate the loans and foreclose on the collateral. Our obligations under the Term Loan are secured by substantially all our current and future assets, other than our intellectual property. If the Term Loan becomes subject to mandatory prepayment under these provisions, we are subject to certain prepayment premiums of 3.00% in the first year, 2.00% in the second year and 1.00% in the third year and thereafter.

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of certain material U.S. federal income tax considerations of the purchase, ownership and disposition of the notes and the ownership and disposition of shares of common stock into which the notes may be converted. This summary is based upon provisions of the Internal Revenue Code of 1986, as amended, or the Code, applicable U.S. Treasury Regulations, administrative rulings and judicial decisions in effect as of the date hereof, any of which may subsequently be changed, possibly retroactively, so as to result in U.S. federal income tax consequences different from those discussed below. This summary deals only with a note or share of common stock held as a capital asset by a beneficial owner who purchased the note on original issuance at its "issue price" (generally, the first price at which a substantial portion of the notes is sold to persons other than bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). This summary is general in nature and does not address all aspects of U.S. federal income taxes and does not address U.S. federal estate and gift tax consequences, or any state, local, or non-U.S. tax consequences. In addition, this summary does not deal with all tax consequences that may be relevant to holders in light of their personal circumstances or particular situations, such as:

- holders who may be subject to special tax treatment, including dealers in securities or currencies, banks, financial institutions, regulated investment companies, real estate investment trusts, tax-exempt entities, insurance companies, persons required for U.S. federal income tax purposes to conform the timing of income accruals to their financial statements, or traders in securities that elect to use a mark-to-market method of tax accounting for their securities;
- persons holding notes or shares of common stock as a part of a hedging, integrated or conversion transaction or a straddle or persons deemed to sell notes or shares of common stock under the constructive sale provisions of the Code;
- U.S. holders (as defined below) whose "functional currency" is not the U.S. dollar;
- "controlled foreign corporations," "passive foreign investment companies," or corporations that accumulate earnings to avoid federal income tax;
- certain former citizens or long-term residents of the United States;
- persons subject to special tax accounting rules under Section 451(b) of the Code;
- partnerships or other pass-through entities or investors in such entities; or
- persons subject to the alternative minimum tax or non-U.S. holders (as defined below) subject to the Medicare contribution tax on net investment income.

If an entity or arrangement, domestic or foreign, that is treated as a partnership for U.S. federal income tax purposes holds notes or shares of common stock, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partnership or partner in a partnership holding the notes or shares of common stock, you should consult your tax advisor.

We have not sought, nor will we seek, a ruling from the Internal Revenue Service, or the IRS, with respect to the matters discussed below. There can be no assurance that the IRS will not take a different position concerning the tax consequences of the purchase, ownership or disposition of the notes or shares of common stock or that any such position would not be sustained.

As used herein, the term "U.S. holder" means a beneficial owner of notes or shares of common stock received upon conversion of the notes that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or any other entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia;

- an estate the income of which is subject to U.S. federal income taxation regardless of its source;
- or a trust, if it (i) is subject to the primary supervision of a court within the United States and one or more U.S. persons have the authority to control all substantial decisions of the trust or (ii) has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

A "non-U.S. holder" is a beneficial owner of notes or shares of common stock received upon conversion of the notes (other than an entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not a U.S. holder.

THIS SUMMARY OF CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IS NOT TAX ADVICE. BOTH U.S. AND NON-U.S. HOLDERS CONSIDERING THE PURCHASE OF NOTES SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE NOTES OR THE SHARES OF COMMON STOCK INTO WHICH THE NOTES ARE CONVERTIBLE ARISING UNDER U.S. FEDERAL ESTATE OR GIFT TAX RULES OR UNDER THE LAWS OF ANY STATE, LOCAL, NON-U.S. OR ANY OTHER TAXING JURISDICTION OR UNDER ANY APPLICABLE TAX TREATY.

Consequences to U.S. Holders

Payments of Interest

It is anticipated, and this discussion assumes, that the notes will be issued with less than a de minimis amount of original issue discount, if any (as determined under the Code and applicable U.S. Treasury Regulations). In such case, interest on a note will generally be taxable to a U.S. holder as ordinary income at the time it is paid or accrued in accordance with the U.S. holder's regular method of accounting for tax purposes.

Additional Amounts

We may be required to make payments of additional interest to holders of the notes, at our option, if we fail to comply with certain reporting and information delivery obligations as described above in the section titled "Description of Notes—Events of Default—Special Interest as Sole Remedy for Certain Reporting Defaults." We believe that there is only a remote possibility that we would pay special interest, or that if such special interest were paid, it would be an incidental amount. We therefore do not intend to treat the notes as subject to the special rules governing certain contingent payment debt instruments. Accordingly, this discussion assumes that the notes are not treated as contingent payment debt instruments. If, contrary to expectations, we pay special interest, although it is not free from doubt, such special interest should be taxable to a U.S. holder as ordinary income at the time it accrues or is paid in accordance with the U.S. holder's regular method of tax accounting. U.S. holders should consult their own tax advisors regarding the treatment of such amounts.

Our position that the notes are not contingent payment debt instruments is binding on each U.S. holder unless such U.S. holder discloses its contrary position to the IRS in the manner required by applicable U.S. Treasury Regulations. Our position that the notes are not contingent payment debt instruments is not, however, binding on the IRS. If the IRS successfully challenged this position, and the notes were treated as contingent payment debt instruments, U.S. holders would, among other things, be required to accrue interest income at a higher rate than the stated interest rate on the notes and generally to treat any gain recognized on the sale or other disposition of a note (including any gain realized on the conversion of a note, regardless of whether we settle the conversion with shares of our common stock, cash or a combination of shares and cash) as ordinary income rather than as capital gain.

Sale, Exchange, Redemption, Repurchase or Other Taxable Disposition of Notes

Except as provided below under the section titled "—Conversion of Notes," a U.S. holder will generally recognize capital gain or loss upon the sale, exchange, redemption, repurchase or other taxable disposition of a note, equal to the difference between the sum of the cash plus the fair market value of any other property received upon such disposition (excluding any amount attributable to accrued but unpaid interest, which will be treated as described above under the section titled "—Payments of Interest") and such U.S. holder's adjusted tax basis in the note. A U.S. holder's tax basis in a note will generally be equal to the amount that the U.S. holder paid for the note, plus the amount, if any, included in income by the U.S. holder on an adjustment to the conversion rate of the note, as described in "—Constructive Distributions" below. Such gain or loss will be capital gain or loss. If, at the time of the sale, exchange, redemption, repurchase or other taxable disposition of the note, the U.S. holder held the note for more than one year, such capital gain or loss would be long-term capital gain or loss. Long-term capital gains recognized by certain non-corporate U.S. holders, including individuals, will generally be subject to a reduced rate of U.S. federal income tax. A U.S. holder's ability to deduct capital losses may be limited.

Conversion of Notes

If a U.S. holder presents a note for conversion, a U.S. holder may receive solely cash, solely common stock or a combination of cash and common stock in exchange for notes, depending upon our chosen settlement method.

If a U.S. holder receives solely common stock (and cash in lieu of a fractional share) in exchange for notes upon conversion, the U.S. holder generally will not recognize gain or loss upon the conversion of the notes into common stock except to the extent of (i) cash received in lieu of a fractional share and (ii) amounts received with respect to accrued interest (which will be treated as described above in the section titled "—Payments of Interest"), subject to the discussion in the section titled "—Constructive Distributions" below regarding the possibility that an adjustment to the conversion rate of a note converted in connection with a fundamental change or a notice of redemption (as described above in the section titled "Description of Notes—Increase in Conversion Rate in Connection with a Make-Whole Fundamental Change") may be treated as a taxable stock dividend. The tax basis of shares of common stock received upon a conversion (including any fractional share deemed to be received by the U.S. holder but excluding shares attributable to accrued interest, the tax basis of which will equal their fair market value) will equal the adjusted tax basis of the note that was converted. The U.S. holder's holding period for the shares of common stock will include the period during which the U.S. holder held the notes, except that the holding period of any shares received with respect to accrued interest will commence on the day after the date of receipt.

If a U.S. holder receives solely cash in exchange for notes upon conversion, the U.S. holder's gain or loss will be determined in the same manner as if the U.S. holder disposed of the notes in a taxable disposition (as described above in the section titled "—Sale, Exchange, Redemption, Repurchase or Other Taxable Disposition of Notes"), subject to the discussion in the section titled "—Constructive Distributions" below regarding the possibility that an adjustment to the conversion rate of a note converted in connection with a fundamental change or a notice of redemption may be treated as a taxable stock dividend.

The U.S. federal income tax treatment of the conversion of a note into cash and common stock is uncertain, and U.S. holders should consult their tax advisors regarding the consequences of such a conversion. In general, the income tax treatment will depend on whether the conversion is treated as a recapitalization (which requires that a note be treated as a security for U.S. federal income tax purposes) or alternatively as a conversion of a portion of the note into common stock and a taxable sale of a portion of the note for cash.

We intend to take the position that the notes are securities for U.S. federal income tax purposes and, if upon a conversion, a U.S. holder receives a combination of cash (other than cash in lieu of a fractional share) and

common stock, that the conversion will be treated as a recapitalization for U.S. federal income tax purposes. The term "security" is not defined in the Code or the U.S. Treasury Regulations and has not been defined clearly by judicial decisions. Therefore, a note may not constitute a "security" for U.S. federal income tax purposes notwithstanding our position. If the conversion is treated as a recapitalization, a U.S. holder will recognize gain, but not loss, in an amount equal to the lesser of (i) the excess of the sum of the cash and the fair market value of the common stock received (other than amounts attributable to accrued interest, which will be treated as described above in the section titled "—Payments of Interest") over the U.S. holder's adjusted tax basis in the notes converted and (ii) the amount of cash received (other than cash received in lieu of a fractional share or cash attributable to accrued interest), subject to the discussion in the section titled "—Constructive Distributions" below regarding the possibility that an adjustment to the conversion rate of a note converted in connection with a fundamental change or notice of redemption may be treated as a taxable stock dividend. Any gain recognized on conversion generally will be capital gain and will be long-term capital gain if, at the time of the conversion, the note has been held for more than one year.

The tax basis of the shares of common stock received upon such a conversion (including any fractional share deemed to be received by the U.S. holder but excluding common stock attributable to accrued interest) generally will equal the tax basis of the note that was converted, reduced by the amount of any cash received (other than cash received in lieu of a fractional share or cash attributable to accrued interest), and increased by the amount of gain, if any, recognized upon conversion (other than with respect to a fractional share). A U.S. holder's tax basis in a fractional share of our common stock will be determined by allocating such holder's tax basis in the shares of our common stock, as determined in accordance with the previous sentence, between the shares of our common stock actually received and the fractional share of our common stock deemed received upon conversion, in accordance with their respective fair market values. A U.S. holder's holding period for shares of common stock (other than common stock attributable to accrued interest) will include the period during which the U.S. holder held the notes. A U.S. holder's tax basis in common stock attributable to accrued interest will equal its fair market value on the date of receipt and the holding period for such stock will commence on the day after the date of receipt. Cash received in lieu of a fractional share of our common stock upon a conversion of a note should be treated as a payment in exchange for the fractional share of our common stock. Accordingly, the receipt of cash in lieu of a fractional share of our common stock should generally result in capital gain or loss, if any, measured by the difference between the cash received for the fractional share of our common stock and a U.S. holder's tax basis allocable to such fractional share of our common stock, as described above.

If the conversion of a note into cash and common stock were not treated as a recapitalization, the cash payment received may be treated as proceeds from the sale of a portion of the note taxable in the manner described under "—Sale, Exchange, Redemption, Repurchase or Other Taxable Disposition of Notes" above, and the common stock received on such a conversion (other than common stock attributable to accrued interest) would be treated as received upon a conversion of the other portion of the note, which generally would not be taxable to a U.S. holder (as described above), subject to the discussion in the section titled "—Constructive Distributions" below regarding the possibility that an adjustment to the conversion rate of a note converted in connection with a fundamental change or notice of redemption may be treated as a taxable stock dividend. In that case, the U.S. holder's tax basis in the note generally would be allocated pro rata among the common stock received and the portion of the note that is treated as sold for cash. The holding period for the common stock received in the conversion (other than common stock attributable to accrued interest) would include the holding period for the notes.

A U.S. holder that converts a note between a record date for an interest payment and the next interest payment date and consequently receives a payment of cash interest, as described above in the section "Description of Notes—Conversion Rights—Treatment of Interest upon Conversion," should consult its own tax advisor concerning the appropriate treatment of such payments.

As described above in the section titled "Description of Notes—Conversion Rights—Treatment of Interest upon Conversion," our delivery of cash, shares of common stock or a combination of cash and shares of common

stock will generally be deemed to satisfy our obligation with respect to accrued and unpaid interest on the notes. We intend to take the position that upon a conversion of notes accrued and unpaid interest is first paid by any cash paid upon such conversion (other than cash paid in lieu of a fractional share).

Exchange in Lieu of Conversion

If a U.S. holder surrenders notes for conversion, we direct the notes to be offered to a financial institution for exchange in lieu of conversion, and the designated institution accepts the notes and delivers shares of our common stock (and cash in lieu of a fractional share of our common stock, if applicable), cash or a combination of cash and common stock in exchange for the notes, the U.S. holder will be taxed on the transfer as a sale or exchange of the notes, as described above under "—Sale, Exchange, Redemption, Repurchase or Other Taxable Disposition of Notes." In such case, the U.S. holder's tax basis in the common stock received will equal the fair market value of the stock on the date of the exchange and its holding period in the shares of common stock received will begin the day after the date of the exchange.

Possible Effect of Change in Conversion Consideration after a Common Stock Change Event

If we undergo certain of the events described above in the section titled "Description of Notes— Conversion Rights—Effect of Common Stock Change Event," the conversion rate and the related conversion consideration may be adjusted such that a U.S. holder would be entitled to convert its notes into the shares, property or assets other than our common stock described in such section. Depending on the facts and circumstances at the time of such event, such adjustment may result in a deemed exchange of the outstanding notes, which may be a taxable event for U.S. federal income tax purposes. Whether or not such an adjustment results in a deemed exchange of the outstanding notes, a subsequent conversion of the notes might be treated as a fully taxable disposition of the notes if the property into which the notes are convertible is no longer stock of the notes' obligor. A U.S. holder should consult its tax advisor regarding the U.S. federal income tax consequences of such an adjustment.

Constructive Distributions

The conversion rate of the notes will be adjusted in certain circumstances. Adjustments (or failures to make adjustments) that have the effect of increasing a U.S. holder's proportionate interest in our assets or earnings may in some circumstances result in a deemed distribution to a U.S. holder for U.S. federal income tax purposes. Adjustments to the conversion rate made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing the dilution of the interest of the holders of the notes, however, will generally not be considered to result in a deemed distribution to a U.S. holder. Certain of the possible conversion rate adjustments provided in the notes (including, without limitation, adjustments in respect of taxable dividends to holders of our common stock) will not qualify as being pursuant to a bona fide reasonable adjustment formula. If such adjustments are made, depending on the circumstances, including whether we have paid in the past or will pay in the future distributions on our stock or interest on other convertible debt, a U.S. holder may be deemed to have received a distribution even though the U.S. holder has not received any cash or property as a result of such adjustments. In addition, an adjustment to the conversion rate in connection with a make-whole fundamental change may be treated as a deemed distribution. Any deemed distributions will be taxable as a dividend, return of capital or capital gain as described in the section titled "—Distributions" below. However, it is not clear whether a constructive dividend deemed paid to a non-corporate U.S. holder would be eligible for the preferential rates of U.S. federal income tax applicable in respect of certain dividends received. It is also unclear whether corporate holders would be entitled to claim the dividends received deduction with respect to any such constructive dividends. Because a constructive dividend deemed received by a U.S. holder would not give rise to any cash from which any applicable withholding could be satisfied, if backup withholding is paid on behalf of a U.S. holder (because such U.S. holder failed to establish an exemption from backup withholding), such backup withholding may be set off against payments of cash and common stock payable on the notes (or, in certain circumstances, against any payments on the common stock).

We are required under current law to report the amount of any deemed distributions on our website or to the IRS and to holders of notes not exempt from reporting. The IRS has proposed regulations addressing the amount and timing of deemed distributions, obligations of withholding agents and filing and notice obligations of issuers effective for deemed distributions occurring on or after the date the regulations are adopted in final form. If adopted as proposed, the regulations would generally provide that (i) the amount of a deemed distribution is the excess of the fair market value of the right to acquire stock immediately after the conversion adjustment over the fair market value of the right to acquire stock without the adjustment, (ii) the deemed distribution occurs at the earlier of the date the adjustment occurs under the terms of the note and the date of the actual distribution of cash or property that results in the deemed distribution, (iii) subject to certain limited exceptions, a withholding agent is required to impose any applicable withholding on deemed distributions and, if there is no associated cash payment, may set off its withholding obligations against payments on the notes (or, in some circumstances, any payments on our common stock) or sales proceeds received by or other funds or assets of an investor, and (iv) we will continue to be required to report the amount of any deemed distributions on our website or to the IRS and to holders of notes. The final regulations will be effective for deemed distributions occurring on or after the date of adoption, but holders of notes and withholding agents may rely on them prior to that date under certain circumstances.

Distributions

Distributions, if any, made on our common stock to a U.S. holder generally will be included in a U.S. holder's income as ordinary dividend income to the extent of our current or accumulated earnings and profits as determined under U.S. federal income tax principles. However, with respect to dividends received by individuals, such dividends generally are taxed at the lower applicable long-term capital gains rates, provided certain holding period requirements are satisfied. Distributions in excess of our current and accumulated earnings and profits will be treated as a return of capital to the extent of a U.S. holder's tax basis in the common stock and thereafter as capital gain from the sale or exchange of such common stock and taxed as described below in "—Sales, Certain Redemptions or Other Taxable Disposition of Common Stock." Dividends received by a corporation may be eligible for a dividends received deduction, subject to applicable limitations.

Sales, Certain Redemptions or Other Taxable Dispositions of Common Stock

Upon the sale, certain redemptions, or other taxable dispositions of our common stock, a U.S. holder generally will recognize capital gain or loss equal to the difference between (i) the amount of cash and the fair market value of all other property received upon such disposition and (ii) the U.S. holder's tax basis in the common stock. Such capital gain or loss will be long-term capital gain or loss if a U.S. holder's holding period in the common stock is more than one year at the time of the taxable disposition. Long-term capital gains recognized by certain non-corporate U.S. holders (including individuals) will generally be subject to reduced rates of U.S. federal income tax. A U.S. holder's ability to deduct capital losses may be limited.

Medicare Tax on Net Investment Income

Generally, a 3.8% Medicare contribution tax is imposed on the net investment income of certain individuals with a modified adjusted gross income of over $200,000 ($250,000 in the case of joint filers) and on the undistributed net investment income of certain estates and trusts. Interest and dividends received (or deemed to be received) by holders of the notes and our common stock and capital gains from the sale or other disposition of notes or common stock generally will constitute net investment income and be subject to the 3.8% tax. U.S. holders that are individuals, estates or trusts should consult their tax advisors regarding the applicability of the Medicare tax to them.

Information Reporting and Backup Withholding

Information reporting requirements generally will apply to payments of interest on the notes (including special interest that we may pay under circumstances described above under the section titled "Description of

Notes—Events of Default—Special Interest as Sole Remedy for Certain Reporting Defaults") and dividends (including constructive dividends deemed paid) on the notes or shares of common stock and to the proceeds of a sale of a note or share of common stock paid to a U.S. holder unless the U.S. holder is an exempt recipient (such as a corporation). Backup withholding (currently at a 24% rate) will apply to those payments if the U.S. holder fails to provide its correct taxpayer identification number, or certification of exempt status, or if the U.S. holder is notified by the IRS that it has failed to report in full payments of interest and dividend income. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a U.S. holder's U.S. federal income tax liability provided the required information is furnished timely to the IRS.

Consequences to Non-U.S. Holders

Payments of Interest

Subject to the discussions of backup withholding and withholding on foreign accounts below, U.S. federal income tax and the 30% U.S. federal withholding tax will not be applied to any payment of interest on a note to a non-U.S. holder provided that:

- such interest is not effectively connected with the non-U.S. holder's conduct of a trade or business in the United States;
- the non-U.S. holder does not actually or constructively own 10% or more of the total combined voting power of all classes of our stock that are entitled to vote within the meaning of Section 871(h)(3) of the Code;
- the non-U.S. holder is not a controlled foreign corporation that is related to us (actually or constructively) through stock ownership;
- the non-U.S. holder is not a bank whose receipt of interest on the notes is described in Section 881(c)(3)(A) of the Code; and
- the non-U.S. holder provides its name and address, and certifies, under penalties of perjury, that it is not a U.S. person (which certification may be made on an IRS Form W-8BEN or IRS Form W-8BEN-E (or other applicable form)) or the non-U.S. holder holds the notes through certain foreign intermediaries or certain foreign partnerships, and the non-U.S. holder and the foreign intermediaries or foreign partnerships satisfy the certification requirements of applicable U.S. Treasury Regulations.

If a non-U.S. holder cannot satisfy the requirements described above, the gross amounts of interest will be subject to the 30% U.S. federal withholding tax, unless the non-U.S. holder provides the applicable withholding agent with a properly executed (i) IRS FormW-8BEN or IRS Form W-8BEN-E (or other applicable form) claiming an exemption from or reduction in withholding under the benefit of an applicable income tax treaty or (ii) IRS Form W-8ECI (or other applicable form) stating that interest paid on the notes is not subject to withholding tax because it is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States and includible in the non-U.S. holder's gross income. If a non-U.S. holder is engaged in a trade or business in the United States and interest on the notes is effectively connected with the conduct of that trade or business and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment, then (although the non-U.S. holder will be exempt from the 30% withholding tax provided the certification requirements discussed above are satisfied) the non-U.S. holder will be subject to U.S. federal income tax on that interest on a net income basis generally in the same manner as if the non-U.S. holder were a U.S. holder. In addition, if anon-U.S. holder is a foreign corporation, it may be subject to a branch profits tax equal to 30% (or lesser rate under an applicable income tax treaty) of its earnings and profits for the taxable year, subject to adjustments, that are effectively connected with its conduct of a trade or business in the United States.

Dividends and Constructive Distributions

Any dividends paid to a non-U.S. holder with respect to the shares of common stock (and any deemed dividends resulting from certain adjustments, or failure to make adjustments, to the conversion rate of the notes,

see the section titled "Consequences to U.S. Holders—Constructive Distributions" above) will be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. However, dividends that are effectively connected with a 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 U.S. permanent establishment) are not subject to the withholding tax, but instead are subject to U.S. federal income tax on a net income basis at graduated individual rates or at the corporate rate, as applicable. Certain certification requirements and disclosure requirements must be complied with in order for effectively connected income to be exempt from withholding. Any such effectively connected income received by a foreign corporation may, under certain circumstances, be subject to an additional branch profits tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty. Because a constructive dividend deemed received by a non-U.S. holder would not give rise to any cash from which any applicable withholding tax could be satisfied, if withholding taxes are paid on behalf of a non-U.S. holder, those withholding taxes may be set off against payments of cash and common stock payable on the notes (or, in certain circumstances, against any payments on the common stock).

A non-U.S. holder of shares of common stock who wishes to claim the benefit of an applicable income tax treaty rate is required to satisfy applicable certification and other requirements. If a non-U.S. holder is eligible for a reduced rate of U.S. withholding tax pursuant to an income tax treaty, it may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

Sales, Exchanges, Certain Redemptions and Repurchases, Conversions or Other Taxable Dispositions of Notes or Shares of Common Stock

Subject to the discussions below regarding backup withholding and withholding on foreign accounts, any gain recognized by a non-U.S. holder on the sale, exchange, certain redemptions and repurchases or other taxable disposition of a note or common stock (as well as upon the conversion of a note into cash or a combination of cash and common stock) will not be subject to U.S. federal income tax unless:

- that gain is effectively connected with a non-U.S. holder's conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a U.S. permanent establishment);
- the non-U.S. holder is an individual who is present in the United States for 183 days or more in the taxable year of that disposition, and certain other conditions are met; or
- we are or have been a "United States real property holding corporation," or USRPHC, for U.S. federal income tax purposes during the shorter of the non-U.S. holder's holding period or the five-year period ending on the date of disposition of the notes or common stock, as the case may be.

If a non-U.S. holder's gain is described in the first bullet point above, such holder will be subject to tax at regular graduated U.S. federal income tax rates on the net gain recognized, generally in the same manner as if such holder were a U.S. holder. If a non-U.S. holder is a foreign corporation that recognizes gain described in the first bullet point above, such holder may also be subject to the branch profits tax equal to 30% (or such lower rate as may be prescribed under an applicable U.S. income tax treaty) of its effectively connected earnings and profits.

If a non-U.S. holder is described in the second bullet point above, such holder will be subject to a flat 30% tax on the gain recognized (which gain may be offset by certain U.S.-source capital losses), even though the holder is not considered a resident of the United States. Any amounts (including common stock) which a non-U.S. holder receives on a sale, exchange, redemption, repurchase, conversion or other taxable disposition of a note which are attributable to accrued interest will be taxable as interest and subject to the rules described above in the section titled "—Payments of Interest."

In general, we would be a USRPHC if the fair market value of our U.S. real property interests equals or exceeds 50% of the sum of the fair market value of our worldwide real property interests plus our other assets

used or held for use in a trade or business. We believe that we are not, and we do not anticipate becoming, a USRPHC for U.S. federal income tax purposes. However, there can be no assurance that we will not become a USRPHC in the future.

Information Reporting and Backup Withholding

Generally, we must report annually to the IRS and tonon-U.S. holders the amount of interest (including special interest that we may pay under circumstances described above under the section titled "Description of Notes—Events of Default—Special Interest as Sole Remedy for Certain Reporting Defaults") and dividends paid to non-U.S. holders (including constructive dividends deemed paid) and the amount of tax, if any, withheld with respect to those payments. Copies of the information returns reporting such interest, dividends and withholding may also be made available to the tax authorities in the country in which a non-U.S. holder resides under the provisions of an applicable income tax treaty. In general, anon-U.S. holder will not be subject to backup withholding with respect to payments of interest or dividends that we make, provided the non-U.S. holder certifies its non-U.S. status on a validly executed IRS Form W-8BEN, IRS Form W-8BEN-E or other applicable IRS Form W-8 (and the applicable withholding agent does not have actual knowledge or reason to know that the holder is a U.S. person, as defined under the Code, that is not an exempt recipient). In addition, a non-U.S. holder will be subject to information reporting and, depending on the circumstances, backup withholding with respect to payments of the proceeds of the sale of a note or share of common stock within the United States or conducted through certain U.S.-related financial intermediaries, unless the non-U.S. holder certifies its non-U.S. status or otherwise establishes an exemption (and we and the relevant financial intermediaries do not have actual knowledge or reason to know that a holder is a U.S. person, as defined under the Code, that is not an exempt recipient) or the non-U.S. holder otherwise establishes an exemption. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against a non-U.S. holder's U.S. federal income tax liability provided the required information is furnished timely to the IRS.

Withholding on Foreign Accounts

Sections 1471 through 1474 of the Code, and the regulations thereunder (commonly referred to as FATCA), impose withholding at a 30% rate on certain types of "withholdable payments" (including interest paid on, and the gross proceeds from the sale or other disposition of, debt instruments, and dividends (including constructive dividends deemed paid) paid on, and the gross proceeds from the sale or other disposition of, stock in a U.S. corporation) made to a "foreign financial institution" or to a "non-financial foreign entity" (all as defined in the Code) (whether such foreign financial institution or non-financial foreign entity is the beneficial owner or an intermediary), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the nonfinancial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner or (iii) the foreign financial institution or non- financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (i) above, it generally must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain U.S. persons or U.S.-owned foreign entities (as defined in applicable U.S. Treasury Regulations), annually report certain information about such accounts and withhold 30% on payments to noncompliant foreign financial institutions and certain other account holders. Many foreign governments have entered into intergovernmental agreements with the United States to implement FATCA in a different manner. If an interest or dividend payment is both subject to withholding under FATCA and subject to the withholding tax discussed above under the sections titled "—Payments of Interest" or "—Dividends and Constructive Distributions," the withholding under FATCA may be credited against, and therefore reduce, such other withholding tax.

FATCA withholding currently applies to payments of interest on the notes, as well as to payments of dividends, if any, on our common stock. Subject to the recently released proposed Treasury Regulations described in this prospectus supplement, FATCA withholding generally will also apply to payments of gross proceeds from the sale or other disposition of the notes or our common stock. The U.S. Treasury Department recently released proposed regulations, however, that, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to gross proceeds from sales or other dispositions of notes or 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.

UNDERWRITING

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus supplement, the underwriters named below, for whom Morgan Stanley & Co. LLC is acting as representative, have severally agreed to purchase, and we have agreed to sell to them, severally, the principal amount of notes indicated below:

Name	Principal Amount of Notes
Morgan Stanley & Co. LLC	78,000,000
Mizuho Securities USA LLC	24,000,000
JMP Securities LLC	12,000,000
H.C. Wainwright & Co. LLC	6,000,000
Total:	$ 120,000,000

The underwriters and the representative are collectively referred to as the "underwriters" and the "representative," respectively. The underwriters are offering the notes subject to their acceptance of the notes from us and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the notes offered by this prospectus supplement are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the notes offered by this prospectus supplement if any such notes are taken. However, the underwriters are not required to take or pay for the notes covered by the underwriters' over-allotment option described below.

The underwriters initially propose to offer the notes directly to the public at the offering price listed on the cover page of this prospectus supplement. After the initial offering of the notes, the offering price and other selling terms may from time to time be varied by the representative.

The notes are a new issue of securities, and there is currently no established trading market for such notes. We do not intend to apply for the notes to be listed on any securities exchange or to arrange for the notes to be quoted on any quotation system.

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus supplement, to purchase up to an additional $18,000,000 principal amount of notes at the public offering price listed on the cover page of this prospectus supplement, less underwriting discounts and commissions, solely to cover over-allotments. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional notes as the number listed next to the underwriter's name in the preceding table bears to the total aggregate principal amount of notes listed next to the names of all underwriters in the preceding table.

The following table shows the price per $1,000 principal amount of notes and total public offering price, underwriting discounts and commissions, and proceeds before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' over-allotment option.

	Per $1,000 Principal Amount of Notes	Total	
		No Exercise	Full Exercise
Public offering price	$ 1,000.00	$ 120,000,000	$ 138,000,000
Underwriting discounts and commissions to be paid by us	$ 30.00	$ 3,600,000	$ 4,140,000
Proceeds, before expenses, to us	$ 970.00	$ 116,400,000	$ 133,860,000

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately $500,000.

Our common stock is listed on the Nasdaq Global Select Market under the trading symbol “CYTK”.

Pursuant to certain “lock-up” agreements, we and our executive officers and directors, have agreed, subject to certain exceptions, not to (a) directly or indirectly offer, sell, assign, transfer, pledge, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or otherwise dispose of, any shares of common stock beneficially owned (as such term is used in Rule 13d-3 of the Exchange Act) or any securities so owned convertible into or exercisable or exchangeable for common stock, or (b) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock, whether any such transaction described in clauses (a) or (b) above is to be settled by delivery of common stock or such other securities, in cash or otherwise, without the prior written consent of Morgan Stanley & Co. LLC, for a period of 90 days after the date of the pricing of the offering.

The exceptions to the lock-up for executive officers and directors are: (a) the transfer of shares of common stock or any securities convertible into or exercisable or exchangeable for common stock (i) as a bona fide gift to an immediate family member of the executive officer or director or to a trust formed for the benefit of an immediate family member, (ii) by will or intestate succession or (iii) by bona fide gift to a charity or educational institution; (b) the transfer of shares of common stock or any securities convertible into shares of common stock to us to cover tax withholding obligations; (c) exercises of any stock options issued pursuant to the company’s equity incentive plans or warrants, provided that any securities received upon exercise will also be subject to the 90-day restricted period; (d) the establishment of a written trading plan pursuant to Rule10b5-1 under the Exchange Act for the transfer of shares of common stock; (e) sales of shares pursuant to an existing written trading plan pursuant to Rule 10b5-1 under the Exchange Act; and (f) the sale of shares underlying options set to expire during the 90-day restricted period.

The exceptions to the lock-up for us are: (a) the sale of the notes, or the issuance of shares of common stock upon conversion of such notes; (b) entry into the capped call transaction with the capped call counterparty; (c) the issuance of common stock, options to acquire common stock or other equity awards pursuant to our equity incentive plans and employee stock purchase plan and such other plans and arrangements as are in existence on the date of the underwriting agreement and described in this prospectus supplement or the accompanying prospectus; (d) the issuance of common stock pursuant to the valid exercises, vesting or settlement of options, other equity awards, warrants or rights outstanding on the date of the underwriting agreement; and (e) the issuance of shares of common stock or securities convertible into or exercisable or exchangeable for shares of common stock pursuant to a strategic partnership, joint venture, merger, collaboration, lending or other contractual arrangement, or in connection with the acquisition or license by us of any business, products or technologies, provided, however, the aggregate number of shares of our common stock that we may sell or issue or agree to sell or issue pursuant to this clause shall not exceed 5% of the total number of shares of our common stock issued and outstanding immediately following the closing of this offering and that such shares described in this clause (e) may not be traded by the recipient during the 90-day restricted period.

In order to facilitate the offering of our notes, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our notes. Specifically, the underwriters may sell more notes than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the aggregate principal amount of notes available for purchase by the underwriters under the option. The underwriters can close out a covered short sale by exercising the option or purchasing notes in the open market. In determining the source of notes to close out a covered short sale, the underwriters will consider, among other things, the open market price of notes compared to the price available under the option. The underwriters may also sell notes in excess of the option, creating a naked short position. The underwriters must close out any naked short position by purchasing notes 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 the notes in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, notes in

the open market to stabilize the price of the notes. These activities may raise or maintain the market price of the notes above independent market levels or prevent or retard a decline in the market price of the notes. The underwriters are not required to engage in these activities and may end any of these activities at any time.

We and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus supplement in electronic format may be made available on websites maintained by one or more underwriters, or selling group members, if any, participating in this offering. The representative may agree to allocate a portion of the notes to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representative to underwriters that may make Internet distributions on the same basis as other allocations.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

In addition, in the ordinary course of their various business activities, the underwriters and their respective 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 and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. The underwriters and their respective affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

Capped Call Transactions

In connection with the pricing of the notes, we entered into a privately negotiated capped call transaction with the capped call counterparty. If the underwriters exercise their over-allotment option, we expect to enter into an additional capped call transaction with the capped call counterparty. The capped call transactions will cover, subject to customary adjustments, the number of shares of our common stock initially underlying the notes. The capped call transactions are generally expected to reduce the potential dilution as a result of conversion of the notes and/or offset any cash payments we are required to make in excess of the principal amount of converted notes, as the case may be, with such reduction and/or offset subject to a cap as described under "Description of Capped Call Transactions."

In connection with establishing its initial hedge of the capped call transactions, the capped call counterparty or its affiliates expect to purchase shares of our common stock and/or enter into various derivatives with respect to our common stock concurrently with or shortly after the pricing of the notes, including with certain investors in the notes. This activity could increase (or reduce the size of any decrease in) the market price of our common stock or the notes at that time.

In addition, the capped call counterparty or its affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions following the pricing of the notes and prior to the maturity of the notes (and are likely to do so on each exercise date of the capped call transactions, which are expected to occur during the 60 trading day period beginning on the 61st scheduled trading day prior to the maturity date of the notes, or following any termination of any portion of the capped call transaction in

connection with any repurchase, redemption or early conversion of the notes). This activity could also cause or avoid an increase or a decrease in the market price of our common stock or the notes, which could affect your ability to convert the notes and, to the extent the activity occurs during any observation period related to a conversion of notes, it could affect the amount and value of the consideration that you will receive upon conversion of the notes.

In addition, if any such capped call transaction fails to become effective, whether or not this offering of notes is completed, the capped call counterparty or its affiliates may unwind their hedge positions with respect to our common stock, which could adversely affect the value of our common stock and, if the notes have been issued, the value of the notes.

Selling Restrictions

European Economic Area

The notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a "retail investor" means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or (ii) a customer within the meaning of Directive 2002/92/EC (as amended, the "Insurance Mediation Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Directive 2003/71/EC (as amended, the "Prospectus Directive").

Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPS Regulation.

United Kingdom

Each underwriter has represented and agreed that:

(a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000, or FSMA), received by it in connection with the issue or sale of the notes in circumstances in which Section 21(1) of the FSMA does not apply to us; and

(b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the notes in, from or otherwise involving the United Kingdom.

Canada

The notes 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 our notes 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 supplement (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 underwriter is not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

LEGAL MATTERS

Cooley LLP is serving as our counsel in this offering. Certain Cooley LLP attorneys own an aggregate of 12,605 shares of our common stock. The underwriters are being represented by Latham & Watkins LLP of San Diego, California, in connection with the offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, and the effectiveness of our internal control over financial reporting as of December 31, 2018, as set forth in their reports, which are incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

The financial statements for the year ended December 31, 2017 incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K for the year ended December 31, 2018 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at *http://www.sec.gov*. The SEC website referenced above also contains reports, proxy statements, and other information about issuers, like us, that file electronically with the SEC.

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge on the Investor section of our website, which is located at *ir.cytokinetics.com*. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference in this prospectus supplement.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus supplement and the accompanying prospectus. We incorporate by reference the following information or documents that we have filed with the SEC (Commission File No. 000-50633):

- our Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the SEC on March 7, 2019, referred to as the Form 10-K;
- the information specifically incorporated by reference into the Form 10-K from our definitive proxy statement on Schedule 14A which was filed with the SEC on April 3, 2019;
- our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2019, which was filed with the SEC on May 9, 2019, for the quarter ended June 30, 2019, which was filed with the SEC on August 9, 2019 and for the quarter ended September 30, 2019, which was filed with the SEC on November 1, 2019;
- our Current Reports on Form 8-K filed with the SEC on January 18, 2019, February 20, 2019, February 21, 2019 (Item 8.01 and Item 9.01), March 4, 2019, March 20, 2019, May 6, 2019, May 17, 2019 (Item 5.02), May 17, 2019 (Item 5.07), May 21, 2019, July 15, 2019 and July 25, 2019;
- our Current Reports on Form 8-K filed with the SEC on February 21, 2019 and May 9, 2019 (Item 2.02 and Item 9.01; as to information therein explicitly filed with the SEC only); and
- the description of our common stock in our registration statement on Form 8-A filed with the SEC on March 12, 2004, including any amendments thereto or reports filed for the purposes of updating this description.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus or in a later filed document that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until we file a post-effective amendment which indicates the termination of the offering of the securities made by this prospectus supplement and the accompanying prospectus. Information in such future filings updates and supplements the information provided in this prospectus supplement and the accompanying prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080
United States of America
Attn: Investor Relations
(650) 624-3000

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PROSPECTUS

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Warrants

From time to time, we may offer and sell any combination of the securities described in this prospectus, either individually or in combination. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

This prospectus provides a general description of the securities. We will provide the specific terms of these offerings and securities in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as the documents incorporated by reference, before buying any of the securities being offered.

This prospectus may not be used to consummate a sale of securities unless accompanied by a prospectus supplement.

We may sell these securities directly to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section titled "Plan of Distribution" in this prospectus and in the applicable prospectus supplement. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, discounts or commissions and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on The Nasdaq Global Select Market under the trading symbol "CYTK." On November 5, 2019, the last reported sale price of our common stock on The Nasdaq Global Select Market was $11.07 per share. The applicable prospectus supplement will contain information, where applicable, as to other listings, if any, on The Nasdaq Global Select Market or other securities exchange of the securities covered by the applicable prospectus supplement.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" on page 6 of this prospectus and any similar section contained in the applicable prospectus supplement and in any free writing prospectuses we have authorized for use in connection with a specific offering, and under similar headings in the documents that are incorporated by reference into this prospectus.

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 date of this prospectus is November 6, 2019.

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ABOUT THIS PROSPECTUS

This prospectus is part of an automatic registration statement on FormS-3 that we filed with the Securities and Exchange Commission, or SEC, using a "shelf" registration process as a "well-known seasoned issuer" as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act. Under this shelf registration statement, we may sell from time to time in one or more offerings common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in combination with other securities as described in this prospectus. Each time we sell any type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. We may also add, update or change in a prospectus supplement or free writing prospectus any of the information contained in this prospectus or in the documents we have incorporated by reference into this prospectus. This prospectus, together with the applicable prospectus supplement, any related free writing prospectus and the documents incorporated by reference into this prospectus and the applicable prospectus supplement, will include all material information relating to the applicable offering. You should carefully read both this prospectus and the applicable prospectus supplement and any related free writing prospectus, together with the additional information described under "Where You Can Find More Information," before buying any of the securities being offered.

This prospectus may not be used to consummate a sale of securities unless accompanied by a prospectus supplement.

You should rely only on the information contained in, or incorporated by reference into, this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different or additional information. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus, any applicable prospectus supplement or any related free writing prospectus. This prospectus, any applicable supplement to this prospectus or any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus, any applicable supplement to this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

The information appearing in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

This prospectus contains and incorporates by reference market data and industry statistics and forecasts that are based on independent industry publications and other publicly available information. Although we believe that these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information. Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus and the documents incorporated herein by reference, these estimates involve risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. Accordingly, investors should not place undue reliance on this information.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will

be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find More Information."

Except as otherwise indicated herein or as the context otherwise requires, references in this prospectus to "Cytokinetics," "the company," "we," "us," "our" and similar references refer to Cytokinetics, Incorporated and its consolidated subsidiaries.

This prospectus and the information incorporated herein by reference include trademarks, service marks and trade names owned by us or other companies. All trademarks, service marks and trade names included or incorporated by reference into this prospectus, any applicable prospectus supplement or any related free writing prospectus are the property of their respective owners.

SUMMARY

This summary highlights selected information contained elsewhere in this prospectus or incorporated by reference herein and does not contain all of the information that you need to consider in making your investment decision. You should carefully read the entire prospectus, the applicable prospectus supplement and any related free writing prospectus, including the risks of investing in our securities discussed under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements and related notes, and the exhibits to the registration statement of which this prospectus is a part, before making your investment decision.

Cytokinetics, Incorporated

Overview

We are a late-stage biopharmaceutical company focused on discovering, developing and commercializing first-in-class muscle activators and next-in-class muscle inhibitors as potential treatments for debilitating diseases in which muscle performance is compromised and/or declining. We have discovered and are developing muscle-directed investigational medicines that may potentially improve the health span of people with devastating cardiovascular and neuromuscular diseases of impaired muscle function. Our research and development activities relating to the biology of muscle function have evolved from our knowledge and expertise regarding the cytoskeleton, a complex biological infrastructure that plays a fundamental role within every human cell. As a leader in muscle biology and the mechanics of muscle performance, we are developing small molecule drug candidates specifically engineered to impact muscle function and contractility.

Our research continues to drive innovation and leadership in muscle biology. All of our drug candidates have arisen from our cytoskeletal research activities. Our focus on the biology of the cytoskeleton distinguishes us from other biopharmaceutical companies, and potentially positions us to discover and develop novel therapeutics that may be useful for the treatment of severe diseases and medical conditions. Each of our drug candidates has a novel mechanism of action compared to currently marketed drugs, which we believe validates our focus on the cytoskeleton as a productive area for drug discovery and development. We intend to leverage our experience in muscle contractility to expand our current pipeline and expect to identify additional potential drug candidates that may be suitable for clinical development.

Company Information

We were incorporated in Delaware in August 1997 as Cytokinetics, Incorporated. We conduct our administration, finance, business development, clinical development, commercial development, quality assurance and regulatory affairs activities primarily from our headquarters located at 280 East Grand Avenue, South San Francisco, California. Our general telephone number at that address is (650) 624-3000 and our website is www.cytokinetics.com. We do not incorporate by reference into this prospectus the information on, or accessible through, our website, and you should not consider it as part of this prospectus.

CYTOKINETICS and our logo used alone and with the mark CYTOKINETICS are our registered service marks and trademarks. Other service marks, trademarks and trade names referred to in this prospectus are the property of their respective owners.

Risks Associated with our Business

Our business is subject to numerous risks, as described under the heading “Risk Factors” contained in the applicable prospectus supplement and in any free writing prospectuses we have authorized for use in connection with a specific offering, and under similar headings in the documents that are incorporated by reference into this prospectus.

THE SECURITIES WE MAY OFFER

We may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in combination from time to time under this prospectus, together with the applicable prospectus supplement and any related free writing prospectus, at prices and on terms to be determined by market conditions at the time of any offering. We may also offer common stock, preferred stock and/or debt securities upon the exercise of warrants. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity;
- original issue discount;
- rates and times of payment of interest or dividends;
- redemption, conversion, exercise, exchange or sinking fund terms;
- restrictive covenants;
- voting or other rights;
- conversion or exchange prices or rates and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange;
- ranking;
- restrictive covenants;
- voting or other rights; and
- a discussion of material or special U.S. federal income tax considerations.

The applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

This prospectus may not be used to consummate a sale of securities unless it is accompanied by a prospectus supplement.

We may sell the securities directly to investors or to or through agents, underwriters, or dealers. We, and our agents, underwriters or dealers reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities to or through agents, underwriters or dealers, we will include in the applicable prospectus supplement:

- the names of those agents, underwriters or dealers;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment or other options, if any; and
- the net proceeds to us.

Common Stock

We may issue shares of our common stock from time to time. Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. 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 from time to time by the board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, holders of common stock are entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock. Holders of common stock have no preemptive, conversion or subscription rights and there are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of the 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 in the future. In this prospectus, we have summarized certain general features of the common stock under "Description of Capital Stock—Common Stock." We urge you, however, to read the applicable prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) related to any common stock being offered.

Preferred Stock

We may issue shares of our preferred stock from time to time, in one or more series. Our board of directors will determine the designations, voting powers, preferences and rights of the preferred stock, as well as the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, preemptive rights, terms of redemption or repurchase, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series. Convertible preferred stock will be convertible into our common stock or exchangeable for other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

If we sell any series of preferred stock under this prospectus, we will fix the designations, voting powers, preferences and rights of such series of preferred stock, as well as the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that contains the terms of the series of preferred stock we are offering. In this prospectus, we have summarized certain general features of the preferred stock under "Description of Capital Stock—Preferred Stock." We urge you, however, to read the applicable prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Debt Securities

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into or exchangeable for our common stock or other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

Any debt securities issued under this prospectus will be issued under one or more documents called indentures, which are contracts between us and a national banking association or other eligible party, as trustee. In this prospectus, we have summarized certain general features of the debt securities under "Description of Debt Securities." We urge you, however, to read the applicable prospectus supplement (and any free writing

prospectus that we may authorize to be provided to you) related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. We have filed the form of indenture as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

Warrants

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or in combination with common stock, preferred stock and/or debt securities. In this prospectus, we have summarized certain general features of the warrants under "Description of Warrants." We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. We have filed forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants that may be offered as exhibits to the registration statement of which this prospectus is a part. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant and/or the warrant agreement and warrant certificate, as applicable, that contain the terms of the particular series of warrants we are offering, and any supplemental agreements, before the issuance of such warrants.

Any warrants issued under this prospectus may be evidenced by warrant certificates. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should consider carefully the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and discussed under the heading "Risk Factors" contained in our most recent Annual Report on Form 10-K and in any subsequent Quarterly Reports on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC, which are incorporated by reference into this prospectus in their entirety, together with other information in this prospectus, the documents incorporated by reference and any free writing prospectus that we may authorize for use in connection with this offering. The risks described in these documents are not the only ones we face, but those that we consider to be material. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. Past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below titled "Forward-Looking Statements."

FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference herein, contains, and any applicable prospectus supplement or free writing prospectus including the documents we incorporate by reference therein may contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, about us and our industry that involve substantial risks and uncertainties. All statements, other than statements of historical facts contained in this Annual Report on Form 10-K, including statements regarding our future financial condition, business strategy and plans, and objectives of management for future operations, are forward-looking statements. In some cases you can identify these statements by forward-looking words such as "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "expect" or the negative or plural of these words or similar expressions. These forward-looking statements include, but are not limited to, statements concerning the following:

- guidance concerning revenues, research and development expenses and general and administrative expenses;
- our capital requirements and needs for additional financing;
- the initiation, design, conduct, enrollment, progress, timing and scope of clinical trials and development activities for our drug candidates conducted by ourselves or our partners, including the anticipated timing for initiation of clinical trials, anticipated rates of enrollment for clinical trials and anticipated timing of results becoming available or being announced from clinical trials;
- the results from the clinical trials, thenon-clinical studies and chemistry, manufacturing, and controls activities of our drug candidates and other compounds, and the significance and utility of such results;
- anticipated interactions with regulatory authorities;
- our and our partners' plans or ability to conduct the continued research and development of our drug candidates and other compounds;
- our expected roles in research, development or commercialization under our strategic alliances with our partners;
- the properties and potential benefits of, and the potential market opportunities for, our drug candidates and other compounds, including the potential indications for which they may be developed;

- the sufficiency of the clinical trials conducted with our drug candidates to demonstrate that they are safe and efficacious;
- our receipt of milestone payments, royalties, reimbursements and other funds from current or future partners under strategic alliances;
- our ability to continue to identify additional potential drug candidates that may be suitable for clinical development;
- market acceptance of our drugs;
- third-party healthcare coverage and reimbursement policies;
- our plans or ability to commercialize drugs, with or without a partner, including our intention to develop sales and marketing capabilities;
- the focus, scope and size of our research and development activities and programs;
- the utility of our focus on the biology of muscle function, and our ability to leverage our experience in muscle contractility to other muscle functions;
- our ability to protect our intellectual property and to avoid infringing the intellectual property rights of others;
- future payments and other obligations under loan and lease agreements;
- potential competitors and competitive products;
- retaining key personnel and recruiting additional key personnel;
- the potential impact of recent accounting pronouncements on our financial position or results of operations; and
- the anticipated use of proceeds of any offering.

These statements reflect our current views with respect to future events and are based on assumptions and are subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. We discuss in greater detail many of these risks under the heading "Risk Factors" contained in the applicable prospectus supplement, in any free writing prospectuses we may authorize for use in connection with a specific offering, and in our most recent annual report on Form 10-K and in any subsequent quarterly reports on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. Also, these forward-looking statements represent our estimates and assumptions only as of the date of the document containing the applicable statement. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. You should read this prospectus, any applicable prospectus supplement, together with the documents we have filed with the SEC that are incorporated by reference and any free writing prospectus that we may authorize for use in connection with this offering completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

USE OF PROCEEDS

Except as described in any applicable prospectus supplement or in any free writing prospectuses we have authorized for use in connection with a specific offering, we currently intend to use the net proceeds from the sale of the securities offered by us hereunder, if any, for working capital, capital expenditures and general corporate purposes, which may include, among other things, funding research and development, clinical trials, vendor payable, potential regulatory submissions, hiring additional personnel and capital expenditures. We may also use a portion of the net proceeds to in-license, acquire, or invest in additional businesses, technologies, products, or assets, though we currently have no specific agreements, commitments, or understandings with respect to any in-licensing or acquisitions.

The amounts and timing of our use of the net proceeds from this offering will depend on a number of factors, such as the timing and progress of our research and development efforts, the timing and progress of any partnering and commercialization efforts, technological advances and the competitive environment for our products. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from the sale of the securities offered by us hereunder. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

DESCRIPTION OF CAPITAL STOCK

As of the date of this prospectus, our authorized capital stock consists of 173,000,000 shares. Those shares consist of 163,000,000 shares designated as common stock, $0.001 par value, and 10,000,000 shares designated as preferred stock, $0.001 par value. As of September 30, 2019, there were 59,081,899 shares of common stock issued and outstanding.

The following is a summary description of the material terms of our capital stock. The description of capital stock is intended as a summary and is qualified in its entirety by reference to our certificate of incorporation and our bylaws.

Common Stock

Voting Rights

Holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. Upon any liquidation, dissolution or winding up of our business, the holders of common stock are entitled to share equally in all assets available for distribution after payment of all liabilities and provision for liquidation preference of shares of preferred stock then outstanding. Holders of common stock have no preemptive rights or rights to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to the common stock. Holders of common stock are entitled to receive dividends declared by the board of directors, out of funds legally available for the payment of dividends, subject to the rights of holders of preferred stock. Currently, we are not paying dividends.

All outstanding shares of common stock are fully paid andnon-assessable, and all shares of common stock offered by this prospectus, or issuable upon conversion or exercise of securities, will, when issued, be validly issued and fully paid and non-assessable.

Preferred Stock

Pursuant to our certificate of incorporation, our board of directors has the authority, without further approval by our stockholders, to designate and issue up to 10,000,000 shares of preferred stock in one or more series. Our board of directors previously designated 8,070 of the authorized shares of preferred stock as Series A convertible preferred stock, and 23,026 of the authorized shares of preferred stock as Series B convertible preferred stock, none of which are currently outstanding. Our board of directors may designate the powers, preferences and rights, and the qualifications, limitations or restrictions of each series of preferred stock, including dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices, and liquidation preferences, any or all of which may be greater than the rights of the common stock. Thus, without stockholder approval, our board of directors could authorize the issuance of preferred stock with voting, conversion and other rights that could dilute the voting power and other rights of holders of our common stock, and may have the effect of decreasing the market price of the common stock.

The description of certain provisions of the preferred stock set forth in any prospectus supplement does not purport to be complete and is subject to and qualified in its entirety by reference to our certificate of incorporation and the certificate of designations relating to each series of preferred stock. The applicable prospectus supplement (and any related free writing prospectus that we may authorize to be provided to you) will describe the specific terms of any series of preferred stock being offered which may include:

- the specific designation, number of shares, seniority and purchase price;
- any liquidation preference per share and any accumulated dividends upon the liquidation, dissolution or winding up of our affairs;

- any redemption, repayment or sinking fund provisions;
- any dividend rate or rates, whether dividend rate is fixed or variable, the date dividends accrue, the dates on which any those dividends will be payable (or the method by which those rates or dates will be determined), and whether dividends will be cumulative;
- any voting rights;
- if other than the currency of the United States, the currency or currencies (including composite currencies) in which the preferred stock is denominated and in which payments will or may be payable;
- the method by which amounts in respect of that series of preferred stock may be calculated and any commodities, currencies or indices, or value, rate or price, relevant to that calculation;
- whether such series of preferred stock is convertible and, if so, the securities or rights into which it is convertible, and the terms and conditions upon which those conversions will be effected;
- the place or places where dividends and other payments on that series of preferred stock will be payable;
- any additional voting, dividend, liquidation, redemption and other rights, preferences, privileges, limitations and restrictions; and
- a discussion of material U.S. federal income tax consequences, if any.

All shares of preferred stock offered by this prospectus, or issuable upon conversion or exercise of securities, will, when issued, be validly issued and fully paid and non-assessable.

The General Corporation Law of the State of Delaware, the state of our incorporation, provides that the holders of preferred stock will have the right to vote separately as a class on any proposal involving fundamental changes in the rights of holders of that preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

The issuance of preferred stock could adversely affect the voting power of holders of common stock and reduce the likelihood that common stockholders will receive dividend payments and payments upon liquidation. The issuance could have the effect of decreasing the market price of the common stock. The issuance of preferred stock also could have the effect of delaying, deterring or preventing a change in control of us.

Anti-Takeover Effects of Some Provisions of Delaware Law

Provisions of Delaware law and our certificate of incorporation and our bylaws could make the acquisition of our company through a tender offer, a proxy contest or other means more difficult and could make the removal of incumbent officers and directors more difficult. We expect these provisions to discourage coercive takeover practices and inadequate takeover bids and to encourage persons seeking to acquire control of our company to first negotiate with our board of directors. We believe that the benefits provided by our ability to negotiate with the proponent of an unfriendly or unsolicited proposal outweigh the disadvantages of discouraging these proposals. We believe the negotiation of an unfriendly or unsolicited proposal could result in an improvement of its terms.

We are subject to Section 203 of the Delaware General Corporation Law, an anti-takeover law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the date the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;

- the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (a) shares owned by persons who are directors and also officers, and (b) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. 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 outstanding voting securities. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may also discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

Anti-Takeover Effects of Provisions of Our Charter Documents

Our certificate of incorporation provides for our board of directors to be divided into three classes serving staggered terms. Approximately one-third of the board of directors will be elected each year. The provision for a classified board could prevent a party who acquires control of a majority of the outstanding voting stock from obtaining control of the board of directors until the second annual stockholders meeting following the date the acquirer obtains the controlling stock interest. The classified board provision could discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of our company and could increase the likelihood that incumbent directors will retain their positions. Our certificate of incorporation provides that directors may be removed with cause by the affirmative vote of the holders of the outstanding shares of common stock.

Our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors. At an annual meeting, stockholders may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors. Stockholders may also consider a proposal or nomination by a person who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given to our Secretary timely written notice, in proper form, of his or her intention to bring that business before the meeting. The bylaws do not give the board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting of the stockholders. However, our bylaws may have the effect of precluding the conduct of business at a meeting if the proper procedures are not followed. These provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.

Under Delaware law, a special meeting of stockholders may be called by the board of directors or by any other person authorized to do so in the certificate of incorporation or the bylaws. Our bylaws authorize a majority of the authorized directors on our board of directors, the chairperson of the board, the chief executive officer, the president or the secretary to call a special meeting of stockholders.

Because our stockholders do not have the right to call a special meeting, a stockholder could not force stockholder consideration of a proposal over the opposition of the board of directors by calling a special meeting of stockholders prior to such time as a majority of the board of directors believed or the chief executive officer

believed the matter should be considered or until the next annual meeting provided that the requestor met the notice requirements. The restriction on the ability of stockholders to call a special meeting means that a proposal to replace the board also could be delayed until the next annual meeting.

Delaware law provides that stockholders may execute an action by written consent in lieu of a stockholder meeting. However, Delaware law also allows us to eliminate stockholder actions by written consent. Elimination of written consents of stockholders may lengthen the amount of time required to take stockholder actions since actions by written consent are not subject to the minimum notice requirement of a stockholder's meeting. However, we believe that the elimination of stockholders' written consents may deter hostile takeover attempts. Without the availability of stockholder's actions by written consent, a holder controlling a majority of our capital stock would not be able to amend our bylaws or remove directors without holding a stockholders' meeting. The holder would have to obtain the consent of a majority of the board of directors, the chairman of the board or the chief executive officer to call a stockholders' meeting and satisfy the notice periods determined by the board of directors. Our certificate of incorporation provides for the elimination of actions by written consent of stockholders.

Listing

Our common stock is listed on The Nasdaq Global Select Market under the trading symbol "CYTK." The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on The Nasdaq Global Select Market or any securities market or other exchange of the preferred stock covered by such prospectus supplement.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. The transfer agent and registrar's address is 250 Royall Street, Canton, Massachusetts 02021.

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indenture, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the debt securities under the indenture that we will enter into with the trustee named in the indenture. The indenture will be qualified under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. We have filed the form of indenture as an exhibit to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The following summary of material provisions of the debt securities and the indenture is subject to, and qualified in its entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indenture that contains the terms of the debt securities.

General

The indenture does not limit the amount of debt securities that we may issue. It provides that we may issue debt securities up to the principal amount that we may authorize and may be in any currency or currency unit that we may designate. Except for the limitations on consolidation, merger and sale of all or substantially all of our assets contained in the indenture, the terms of the indenture do not contain any covenants or other provisions designed to give holders of any debt securities protection against changes in our operations, financial condition or transactions involving us.

We may issue the debt securities issued under the indenture as “discount securities,” which means they may be sold at a discount below their stated principal amount. These debt securities, as well as other debt securities that are not issued at a discount, may be issued with “original issue discount,” or OID, for U.S. federal income tax purposes because of interest payment and other characteristics or terms of the debt securities. Material U.S. federal income tax considerations applicable to debt securities issued with OID will be described in more detail in any applicable prospectus supplement.

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- the title of the series of debt securities;
- any limit upon the aggregate principal amount that may be issued;
- the maturity date or dates;
- the form of the debt securities of the series;
- the applicability of any guarantees;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- whether the debt securities rank as senior debt, senior subordinated debt, subordinated debt or any combination thereof, and the terms of any subordination;

- if the price (expressed as a percentage of the aggregate principal amount thereof) at which such debt securities will be issued is a price other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof, or if applicable, the portion of the principal amount of such debt securities that is convertible into another security or the method by which any such portion shall be determined;
- the interest rate or rates, which may be fixed or variable, or the method for determining the rate or rates and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- if applicable, the date or dates after which, or the period or periods during which, and the price or prices at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- the date or dates, if any, on which, and the price or prices at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- the denominations in which we will issue the series of debt securities, if other than denominations of $1,000 and any integral multiple thereof;
- any and all terms, if applicable, relating to any auction or remarketing of the debt securities of that series and any security for our obligations with respect to such debt securities and any other terms which may be advisable in connection with the marketing of debt securities of that series;
- whether the debt securities of the series shall be issued in whole or in part in the form of a global security or securities, the terms and conditions, if any, upon which such global security or securities may be exchanged in whole or in part for other individual securities, and the depositary for such global security or securities;
- if applicable, the provisions relating to conversion or exchange of any debt securities of the series and the terms and conditions upon which such debt securities will be so convertible or exchangeable, including the conversion or exchange price, as applicable, or how it will be calculated and may be adjusted, any mandatory or optional (at our option or the holders' option) conversion or exchange features, the applicable conversion or exchange period and the manner of settlement for any conversion or exchange;
- if other than the full principal amount thereof, the portion of the principal amount of debt securities of the series which shall be payable upon declaration of acceleration of the maturity thereof;
- additions to or changes in the covenants applicable to the particular debt securities being issued, including, among others, the consolidation, merger or sale covenant;
- additions to or changes in the events of default with respect to the securities and any change in the right of the trustee or the holders to declare the principal, premium, if any, and interest, if any, with respect to such securities to be due and payable;
- additions to or changes in or deletions of the provisions relating to covenant defeasance and legal defeasance;
- additions to or changes in the provisions relating to satisfaction and discharge of the indenture;
- additions to or changes in the provisions relating to the modification of the indenture both with and without the consent of holders of debt securities issued under the indenture;
- the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;

- whether interest will be payable in cash or additional debt securities at our or the holders' option and the terms and conditions upon which the election may be made;
- the terms and conditions, if any, upon which we will pay amounts in addition to the stated interest, premium, if any and principal amounts of the debt securities of the series to any holder that is not a "United States person" for federal tax purposes;
- any restrictions on transfer, sale or assignment of the debt securities of the series; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, any other additions or changes in the provisions of the indenture, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

We will set forth in the applicable prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to settlement upon conversion or exchange and whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indenture will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of our assets as an entirety or substantially as an entirety. However, any successor to or acquirer of such assets (other than a subsidiary of ours) must assume all of our obligations under the indenture or the debt securities, as appropriate.

Events of Default under the Indenture

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indenture with respect to any series of debt securities that we may issue:

- if we fail to pay any installment of interest on any series of debt securities, as and when the same shall become due and payable, and such default continues for a period of 90 days; provided, however, that a valid extension of an interest payment period by us in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of interest for this purpose;
- if we fail to pay the principal of, or premium, if any, on any series of debt securities as and when the same shall become due and payable whether at maturity, upon redemption, by declaration or otherwise, or in any payment required by any sinking or analogous fund established with respect to such series; provided, however, that a valid extension of the maturity of such debt securities in accordance with the terms of any indenture supplemental thereto shall not constitute a default in the payment of principal or premium, if any;
- if we fail to observe or perform any other covenant or agreement contained in the debt securities or the indenture, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive written notice of such failure, requiring the same to be remedied and stating that such is a notice of default thereunder, from the trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series; and
- if specified events of bankruptcy, insolvency or reorganization occur.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the trustee or the holders of at least 25% in aggregate principal

amount of the outstanding debt securities of that series, by notice to us in writing, and to the trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any waiver shall cure the default or event of default.

Subject to the terms of the indenture, if an event of default under an indenture shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, or exercising any trust or power conferred on the trustee, with respect to the debt securities of that series, provided that:

- the direction so given by the holder is not in conflict with any law or the applicable indenture; and
- subject to its duties under the Trust Indenture Act, the trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the indenture or to appoint a receiver or trustee, or to seek other remedies only if:

- the holder has given written notice to the trustee of a continuing event of default with respect to that series;
- the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request;
- such holders have offered to the trustee indemnity satisfactory to it against the costs, expenses and liabilities to be incurred by the trustee in compliance with the request; and
- the trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We will periodically file statements with the trustee regarding our compliance with specified covenants in the indenture.

Modification of Indenture; Waiver

We and the trustee may change an indenture without the consent of any holders with respect to specific matters:

- to cure any ambiguity, defect or inconsistency in the indenture or in the debt securities of any series;
- to comply with the provisions described above under “Description of Debt Securities—Consolidation, Merger or Sale;”

- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add to our covenants, restrictions, conditions or provisions such new covenants, restrictions, conditions or provisions for the benefit of the holders of all or any series of debt securities, to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default or to surrender any right or power conferred upon us in the indenture;
- to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the indenture;
- to make any change that does not adversely affect the interests of any holder of debt securities of any series in any material respect;
- to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided above under "Description of Debt Securities—General" to establish the form of any certifications required to be furnished pursuant to the terms of the indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
- to evidence and provide for the acceptance of appointment under any indenture by a successor trustee; or
- to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act.

In addition, under the indenture, the rights of holders of a series of debt securities may be changed by us and the trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- extending the fixed maturity of any debt securities of any series;
- reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any series of any debt securities; or
- reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

Discharge

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- provide for payment;
- register the transfer or exchange of debt securities of the series;
- replace stolen, lost or mutilated debt securities of the series;
- pay principal of and premium and interest on any debt securities of the series;
- maintain paying agencies;
- hold monies for payment in trust;
- recover excess money held by the trustee;
- compensate and indemnify the trustee; and
- appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the trustee money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of $1,000 and any integral multiple thereof. The indenture provides that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company, or DTC, or another depositary named by us and identified in the applicable prospectus supplement with respect to that series. To the extent the debt securities of a series are issued in global form and as book-entry, a description of terms relating to any book-entry securities will be set forth in the applicable prospectus supplement.

At the option of the holder, subject to the terms of the indenture and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indenture and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional security registrars or transfer agents or rescind the designation of any security registrars or transfer agent or approve a change in the office through which any security registrars or transfer agent acts, except that we will be required to maintain a security registrar and a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Trustee

The trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the trustee is under no obligation to exercise any of the powers given it by the indenture at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement, we will designate the corporate trust office of the trustee as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We may at any time rescind the designation or any paying agent or approve a change in the office through which any paying agent acts, except that we will be required to maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the trustee for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

The indenture and the debt securities will be governed by and construed in accordance with the internal laws of the State of New York, except to the extent that the Trust Indenture Act is applicable.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplement and in any related free writing prospectus that we may authorize to be distributed to you, summarizes the material terms and provisions of the warrants that we may offer under this prospectus, which may consist of warrants to purchase common stock, preferred stock or debt securities and may be issued in one or more series. Warrants may be offered independently or in combination with common stock, preferred stock or debt securities offered by any prospectus supplement. While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The following description of warrants will apply to the warrants offered by this prospectus unless we provide otherwise in the applicable prospectus supplement. The applicable prospectus supplement for a particular series of warrants may specify different or additional terms.

We have filed forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants that may be offered as exhibits to the registration statement of which this prospectus is a part. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant and/or the warrant agreement and warrant certificate, as applicable, that contain the terms of the particular series of warrants we are offering, and any supplemental agreements, before the issuance of such warrants. The following summaries of material terms and provisions of the warrants are subject to, and qualified in their entirety by reference to, all the provisions of the form of warrant and/or the warrant agreement and warrant certificate, as applicable, and any supplemental agreements applicable to a particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplement related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectus, and the complete form of warrant and/or the warrant agreement and warrant certificate, as applicable, and any supplemental agreements, that contain the terms of the warrants.

General

We will describe in the applicable prospectus supplement the terms of the series of warrants being offered, including, to the extent applicable:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;

- a discussion of material or special U.S. federal income tax considerations of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or, payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any; or
- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. The warrants may be exercised as set forth in the prospectus supplement relating to the warrants offered. Unless we otherwise specify in the applicable prospectus supplement, warrants may be exercised at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Upon receipt of payment and the warrant or warrant certificate, as applicable, properly completed and duly executed at the corporate trust office of the warrant agent, if any, or any other office, including ours, indicated in the prospectus supplement, we will, as soon as practicable, issue and deliver the securities purchasable upon such exercise. If less than all of the warrants (or the warrants represented by such warrant certificate) are exercised, a new warrant or a new warrant certificate, as applicable, will be issued for the remaining warrants.

Governing Law

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

Enforceability of Rights by Holders of Warrants

Each warrant agent, if any, will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

LEGAL OWNERSHIP OF SECURITIES

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee, depositary or warrant agent maintain for this purpose as the "holders" of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as "indirect holders" of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

Book-Entry Holders

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Securities issued in global form will be registered in the name of the depositary or its participants. Consequently, for securities issued in global form, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a global security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not legal holders, of the securities.

Street Name Holders

We may terminate a global security or issue securities innon-global form. In these cases, investors may choose to hold their securities in their own names or in "street name." Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we or any applicable trustee or depositary will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we or any such trustee or depositary will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not legal holders, of those securities.

Legal Holders

Our obligations, as well as the obligations of any applicable trustee or any third party employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with its participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture or for other purposes. In such an event, we would seek approval only from the holders, and not the indirect holders, of the securities. Whether and how the holders contact the indirect holders is up to the holders.

Special Considerations for Indirect Holders

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

- how it handles securities payments and notices;
- whether it imposes fees or charges;
- how it would handle a request for the holders' consent, if ever required;
- whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

Global Securities

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we issue to, deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the applicable prospectus supplement, DTC will be the depositary for all securities issued in book-entry form.

A global security may not be transferred to or registered in the name of anyone other than the depositary, its nominee or a successor depositary, unless special termination situations arise. We describe those situations below under the section titled "Special Situations When a Global Security Will Be Terminated." As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker, bank or other financial institution that in turn has an account with the depositary or with another institution that does. Thus, an investor whose security is represented by a global security will not be a legal holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

Special Considerations for Global Securities

The rights of an indirect holder relating to a global security will be governed by the account rules of the investor's financial institution and of the depositary, as well as general laws relating to securities transfers. We

do not recognize an indirect holder as a holder of securities and instead deal only with the depositary that holds the global security.

If securities are issued only in the form of a global security, an investor should be aware of the following:

- an investor cannot cause the securities to be registered in his or her name, and cannot obtainnon-global certificates for his or her interest in the securities, except in the special situations we describe below;
- an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;
- an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- an investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- the depositary's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in a global security;
- we and any applicable trustee have no responsibility for any aspect of the depositary's actions or for its records of ownership interests in a global security, nor do we or any applicable trustee supervise the depositary in any way;
- the depositary may, and we understand that DTC will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your bank or broker may require you to do so as well; and
- financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, transfers, exchanges, notices and other matters relating to the securities.

There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

Special Situations When a Global Security Will Be Terminated

In a few special situations described below, the global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own name, so that they will be direct holders. We have described the rights of holders and street name investors above.

Unless we provide otherwise in the applicable prospectus supplement, the global security will terminate when the following special situations occur:

- if the depositary notifies us that it is unwilling, unable or no longer qualified to continue as depositary for that global security and we do not appoint another institution to act as depositary within 90 days;
- if we notify any applicable trustee that we wish to terminate that global security; or
- if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.

The applicable prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the prospectus supplement. When a global security terminates, the depositary, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, direct sales to the public, "at the market" offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

A prospectus supplement or supplements (and any related free writing prospectus that we may authorize to be provided to you) will describe the terms of the offering of the securities, including, to the extent applicable:

- the name or names of the underwriters or agents, if any;
- the purchase price of the securities or other consideration therefor, and the proceeds, if any, we will receive from the sale;
- any over-allotment or other options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and other items constituting agents' or underwriters' compensation;
- any public offering price;
- any discounts or concessions allowed or reallowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment or other option. Any public offering price and any discounts or concessions allowed or reallowed or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters or agents that are qualified market makers on The Nasdaq Global Select Market may engage in passive market making transactions in the common stock on The Nasdaq Global Select Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by this prospectus and any supplement thereto, will be passed upon for us by Cooley LLP. Certain Cooley LLP attorneys own an aggregate of 12,605 shares of our common stock. Additional legal matters may be passed upon for us or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, and the effectiveness of our internal control over financial reporting as of December 31, 2018, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

The financial statements for the year ended December 31, 2017 incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2018 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement we filed with the SEC. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You should rely only on information contained in this prospectus or incorporated by reference into this prospectus. We have not authorized any person to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of the securities offered by this prospectus.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public at the SEC's website at http://www.sec.gov.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act until the termination of the offering of the shares covered by this prospectus (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K):

- our Annual Report on Form 10-K for the year ended December 31, 2018, which was filed with the SEC on March 7, 2019 (the "Form 10-K");
- the information specifically incorporated by reference into the Form 10-K from our definitive proxy statement on Schedule 14A, which was filed with the SEC on April 3, 2019;
- our Quarterly Reports on Form 10-Q for the quarter ended March 31, 2019, which was filed with the SEC on May 9, 2019, for the quarter ended June 30, 2019, which was filed with the SEC on August 9, 2019 and for the quarter ended September 30, 2019, which was filed with the SEC on November 1, 2019;
- our Current Reports on Form 8-K filed with the SEC on January 18, 2019, February 20, 2019, February 21, 2019 (Items 8.01 and 9.01), March 4, 2019, March 20, 2019, May 6, 2019, May 17, 2019 (Item 5.02), May 17, 2019 (Item 5.07), May 21, 2019, July 15, 2019 and July 25, 2019;
- our Current Reports on Form 8-K filed with the SEC on February 21, 2019 and May 9, 2019 (in each case, as to information therein explicitly filed with the SEC only); and
- the description of our common stock in our registration statement on Form 8-A filed with the SEC on March 12, 2004, including any amendments thereto or reports filed for the purposes of updating this description.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until we file a post-effective amendment that indicates the termination of the offering of the shares of our common stock made by this prospectus and will become a part of this prospectus from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Cytokinetics, Incorporated
280 East Grand Avenue
South San Francisco, California 94080
United States of America
Attn: Investor Relations
(650) 624-3000

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$120,000,000

4.00% Convertible Senior Notes due 2026

PROSPECTUS SUPPLEMENT

Morgan Stanley

Mizuho Securities

JMP Securities

H.C. Wainwright & Co.

November 7, 2019