

As filed with the Securities and Exchange Commission on May 18, 2021

Registration No. 333 -

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

**FORM S-3  
REGISTRATION STATEMENT**  
*UNDER  
THE SECURITIES ACT OF 1933*

**AKERO THERAPEUTICS, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**81-5266573**  
(I.R.S. Employer  
Identification Number)

**601 Gateway Boulevard, Suite 350  
South San Francisco, CA 94080  
(650) 487-6488**

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

**Andrew Cheng, M.D., Ph.D.**  
**President and Chief Executive Officer**  
**Akero Therapeutics, Inc.**  
**601 Gateway Boulevard, Suite 350**  
**South San Francisco, CA 94080**  
**(650) 487-6488**

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

*With copies to:*

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**Jonathan Young, Ph.D., J.D.**  
**Co-Founder and Chief Operating Officer**  
**Akero Therapeutics, Inc.**  
**601 Gateway Boulevard, Suite 350**  
**South San Francisco, CA 94080**  
**(650) 487-6488**

**Approximate date of commencement of proposed sale to the public:** From time to time after this Registration Statement becomes effective.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting company

Emerging growth company

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

#### CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered <sup>(1)</sup>	Proposed Maximum Offering Price Per Unit <sup>(2)</sup>	Proposed Maximum Aggregate Offering Price <sup>(2)</sup>	Amount of Registration Fee <sup>(2)</sup>
Common Stock, \$0.0001 par value per share <sup>(3)</sup>	—	—	—	—
Preferred Stock, \$0.0001 par value per share <sup>(4)</sup>	—	—	—	—
Debt Securities <sup>(5)</sup>	—	—	—	—
Warrants <sup>(6)</sup>	—	—	—	—
Units <sup>(7)</sup>	—	—	—	—
Total	—	—	—	—
<b>Primary Offering of Common Stock:</b>				
Common Stock, \$0.0001 par value per share	\$100,000,000		\$100,000,000	\$10,910
Total	(1)	(2)	(1)	(3)

- (1) Not applicable pursuant to General Instruction II.E of Form S-3 under the Securities Act of 1933, as amended, or the Securities Act. An indeterminate amount of the securities of each identified class are being registered as may from time to time be offered hereunder at indeterminate prices, along with an indeterminate number of securities that may be issued upon exercise, settlement, exchange or conversion of securities offered or sold hereunder. Separate consideration may or may not be received for securities that are issuable upon exercise, settlement, exchange or conversion of other securities. Any securities registered hereunder may be sold separately or as units with the other securities registered hereunder.
- (2) In accordance with Rules 456(b) and 457(r) under the Securities Act, except with respect to the \$10,910 to be paid in connection with the primary offering of common stock described in the table, which is being paid with the filing of this registration statement, the registrant is deferring payment of all of the registration fee. Any registration fees will be paid subsequently on a pay-as-you-go basis in accordance with Rule 457(r).
- (3) Including such indeterminate amount of common stock as may be issued from time to time at indeterminate prices or upon conversion of debt securities and/or preferred stock registered hereby, or upon exercise of warrants registered hereby, as the case may be.
- (4) Including such indeterminate amount of preferred stock as may be issued from time to time at indeterminate prices or upon conversion of debt securities and/or preferred stock registered hereby, or upon exercise of warrants registered hereby, as the case may be.
- (5) Including such indeterminate principal amount of debt securities as may be issued from time to time at indeterminate prices or upon exercise of warrants registered hereby, as the case may be.
- (6) Including such indeterminate number of warrants or other rights, including without limitation share purchase or subscription rights, as may be issued from time to time at indeterminate prices.
- (7) Each unit will be issued under a unit agreement and will represent an interest in two or more securities, which may or may not be separable from one another.

### EXPLANATORY NOTE

This registration statement contains:

- a base prospectus which covers the offering, issuance and sale by the registrant of the registrant's common stock, preferred stock, debt securities, warrants and/or units; and
- an equity distribution agreement prospectus covering the offering, issuance and sale by the registrant of up to a maximum aggregate offering price of \$100,000,000 of the registrant's common stock that may be issued and sold from time to time under a distribution agreement with J.P. Morgan Securities LLC.

**The base prospectus immediately follows this explanatory note. The specific terms of any securities to be offered pursuant to the base prospectus will be specified in a prospectus supplement to the base prospectus. The equity distribution agreement prospectus immediately follows the base prospectus.**

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PROSPECTUS



**Common Stock  
Preferred Stock  
Debt Securities  
Warrants  
Units**

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We may from time to time issue, in one or more series or classes, our common stock, preferred stock, debt securities, warrants and/or units, in any combination, together or separately, in one or more offerings in amounts, at prices and on the terms that we will determine at the time of the offering and which will be set forth in a prospectus supplement to this prospectus and any related free writing prospectus.

We may offer these securities separately or together in units. Each time we sell securities described herein, we will provide prospective investors with a supplement to this prospectus that will specify the terms of the securities being offered. We may sell these securities to or through underwriters or dealers and also to other purchasers or through agents. We will set forth the names of any underwriters or agents, and any fees, conversions, or discount arrangements, in the applicable prospectus supplement. We may not sell any securities under this prospectus without delivery of the applicable prospectus supplement. You should read this document and any prospectus supplement or amendment carefully before you invest in our securities.

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Our common stock is listed on The Nasdaq Global Select Market under the symbol "AKRO." On May 12, 2021, the closing price for our common stock, as reported on The Nasdaq Global Select Market, was \$27.50 per share. Our principal executive offices are located at 601 Gateway Boulevard, Suite 350, South San Francisco, California 94080 and our phone number is (650) 487-6488.

**Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" contained in this prospectus beginning on page 4 and any applicable prospectus supplement, and under similar headings in the other 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 May 18, 2021

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**ABOUT THIS PROSPECTUS**

This prospectus is part of an automatic shelf registration statement that we filed with the Securities and Exchange Commission, or the SEC, 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, we and/or selling stockholders may offer shares of our common stock and preferred stock, various series of warrants to purchase common stock or preferred stock, debt securities or any combination thereof, from time to time in one or more offerings.

This prospectus provides you with a general description of the securities we may offer. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement may also add, update or change information contained in this prospectus. If there is any inconsistency between the information in this prospectus and a prospectus supplement, you should rely on the information in that prospectus supplement. You should read both this prospectus and any applicable prospectus supplement together with the additional information described under the heading “Where You Can Find More Information” and “Incorporation By Reference.”

You should rely only on the information contained in or incorporated by reference in this prospectus, any applicable prospectus supplement or in any related free writing prospectus filed by us with the SEC. We have not authorized anyone to provide you with different information. This prospectus and any applicable prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the securities described in the applicable prospectus supplement or an offer to sell or the solicitation of an offer to buy such securities in any circumstances in which such offer or solicitation is unlawful. You should assume that the information appearing in this prospectus, any prospectus supplement, the documents incorporated by reference and any related free writing prospectus is accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed materially since those dates.

**THIS PROSPECTUS MAY NOT BE USED TO OFFER AND SELL SECURITIES UNLESS IT IS ACCOMPANIED BY AN ADDITIONAL PROSPECTUS OR A PROSPECTUS SUPPLEMENT.**

As used in this prospectus, unless the context otherwise requires, references to the “company,” “Aker,” “we,” “us” and “our” refer to Aker Therapeutics, Inc. and, where appropriate, our subsidiary.

## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as “may,” “will,” “could,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “projects,” “seeks,” “endeavor,” “potential,” “continue,” and similar expressions, or the negative of these terms, or similar expressions. Accordingly, these statements involve estimates, assumptions, risks and uncertainties which could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus, and in particular those factors referenced in the section “Risk Factors.”

This prospectus contains forward-looking statements that are based on our management’s belief and assumptions and on information currently available to our management. These statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

These forward-looking statements include, among other things, statements about:

- the success, cost and timing of our product development activities and clinical trials, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available, and our research and development programs;
- our ability to complete enrollment in our ongoing Phase 2b clinical trial of EFX in NASH patients with F2/F3 fibrosis, known as the HARMONY study, including the ability to obtain data and maintain our expected timelines during the ongoing COVID-19 pandemic;
- our ability to submit information to regulatory authorities that supports initiation of our planned Phase 2b clinical trial of EFX in cirrhotic NASH patients with F4 fibrosis, known as the SYMMETRY study, during the ongoing COVID-19 pandemic;
- the potential for COVID-19 or other pandemic, epidemic or outbreak of an infectious disease, to disrupt our business plans, product development activities, ongoing clinical trials, including the timing and enrollment of patients, the health of our employees and the strength of our supply chain;
- our ability to advance any product candidate into or successfully complete any clinical trial;
- our ability to successfully manufacture our product candidates for future clinical trials or for commercial use, if approved;
- the potential for our identified research priorities to advance our technologies;
- our ability to obtain and maintain regulatory approval, if obtained, of EFX or any future product candidates, and any related restrictions, limitations and/or warnings in the label of an approved product candidate;
- the ability to license additional intellectual property relating to any future product candidates and to comply with our existing license agreement;
- our ability to commercialize our products in light of the intellectual property rights of others;
- the success of competing therapies that are or become available;
- our ability to obtain funding for our operations, including funding necessary to complete further development and commercialization of our product candidates;
- the commercialization of our product candidates, if approved;

- our plans to research, develop and commercialize our product candidates;
- our ability to attract collaborators with development, regulatory and commercialization expertise;
- future agreements with third parties in connection with the commercialization of our product candidates and any other approved product;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- the rate and degree of market acceptance of our product candidates;
- regulatory developments in the United States and foreign countries;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- our ability to attract and retain key scientific or management personnel;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- the impact of laws and regulations; and
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates.

These forward-looking statements are neither promises nor guarantees of future performance due to a variety of risks and uncertainties and other factors more fully discussed in the “Risk Factors” section in this prospectus, the section of any accompanying prospectus supplement entitled “Risk Factors” and the risk factors and cautionary statements described in other documents that we file from time to time with the SEC, specifically under “Item 1A. Risk Factors” and elsewhere in our most recent Annual Report on Form 10-K for the period ended December 31, 2020, and our Current Reports on Form 8-K.

You should read this prospectus and the documents that we incorporate by reference in this prospectus completely and with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements in this prospectus and the documents we incorporate by reference herein represent our views as of their respective dates. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we have no current intention of doing so except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

This prospectus and the documents incorporated by reference also contain estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.



## RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks referenced below and described in the documents incorporated by reference in this prospectus and any prospectus supplement, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks referenced below and described in the documents incorporated herein by reference, including (i) [our annual report on Form 10-K for the fiscal year ended December 31, 2020](#), which is on file with the SEC and is incorporated herein by reference, (ii) [our quarterly report on Form 10-Q for the quarter ended March 31, 2021](#), which is on file with the SEC and incorporated herein by reference, and (iii) other documents we file with the SEC that are deemed incorporated by reference into this prospectus.

## ABOUT THE COMPANY

We are a cardio-metabolic nonalcoholic steatohepatitis, or NASH, company dedicated to developing pioneering medicines designed to restore metabolic balance and improve overall health. Our lead product candidate, efruxifermin, or EFX, is an analog of fibroblast growth factor 21, or FGF21, which is an endogenously expressed hormone that protects against cellular stress and regulates metabolism of lipids, carbohydrates and proteins throughout the body. We conducted a Phase 2a clinical trial, the BALANCED study, to evaluate EFX in the treatment of biopsy-confirmed NASH patients. The main portion of this study in NASH patients with F1-F3 fibrosis showed EFX's potential to reverse fibrosis, reduce liver fat, improve liver health, improve glycemic control and reduce risks of cardiovascular disease. In February we began screening for a Phase 2b clinical trial, the HARMONY study, to evaluate EFX in the treatment of NASH patients with F2/F3 fibrosis. Preliminary results of the HARMONY study, expected in the third quarter of 2022, will inform dose selection for a registrational Phase 3 clinical trial. An expansion cohort of the BALANCED study, Cohort C, evaluating EFX in the treatment of NASH patients with cirrhosis (F4), for which we reported data on March 22, 2021, showed EFX's potential to reverse fibrosis in patients at greatest risk of progressing to liver failure. We plan to initiate a Phase 2b clinical trial, the SYMMETRY study, in the second half of 2021. Based on clinical data to date, we believe EFX has the potential to be a highly differentiated, potentially best-in-class FGF21 analog and foundational NASH monotherapy for each of the F2/F3 and F4 NASH populations.

The rapidly rising prevalence of NASH is driven by the global obesity epidemic. Poor diet and lack of exercise lead to caloric overburdening of the liver and accumulation of excessive liver fat. In patients with NASH, excessive liver fat leads to hepatocyte stress, which triggers localized inflammation and, as disease progresses, can lead to fibrosis and ultimately cirrhosis. According to a study published in *Hepatology* (2018), the prevalence of NASH in the United States is projected to increase from an estimated 17.3 million in 2016 to 27.0 million by 2030. In particular, the prevalence of patients with advanced fibrosis in the United States is projected to more than double between 2016 and 2030. NASH is the liver manifestation of metabolic syndrome and is frequently associated with insulin resistance and T2D. Additionally, patients with NASH have high rates of cardiovascular-related events, such as stroke and heart attack, with cardiovascular disease being the leading cause of death in patients with NASH. There are currently no approved therapies for NASH, while emerging potential NASH therapies in late-stage clinical development have shown limited efficacy or may be limited by unwanted side effects.

### ***Emerging EFX therapeutic profile***

We are now developing EFX for the treatment of two distinct patient populations: (1) patients with compensated cirrhosis (F4) and (2) patients with pre-cirrhotic NASH (F2/F3). We recently reported that 7 of 12 (58%) EFX-treated patients with cirrhotic NASH who had end-of-treatment biopsies achieved either a one-stage improvement without worsening of NASH or NASH resolution, compared with 0 of 5 (0%) for placebo. 4 of 12 (33%) EFX patients achieved at least a 1-stage improvement of fibrosis and no worsening of NASH, compared with 0 of 5 (0%) for placebo. A separate 3 of 12 (25%) EFX patients achieved NASH resolution, compared with 0 of 5 (0%) for placebo. These results set EFX apart: prior to the results of Cohort C, there were no public reports of histologic improvement in treating cirrhotic NASH patients, after adjusting for placebo, for any other single investigational drug product.

Results from Cohort C build on a strong foundation. EFX has been administered to a total of 162 adult patients with either NASH (n=79) or T2D (n=83) in three randomized, double-blind, placebo-controlled clinical trials for up to 16 weeks. In all three trials, patients treated with EFX achieved highly statistically significant improvements in lipoprotein profile, including reduction in triglycerides of up to 45%, a key attribute given that cardiovascular disease remains the number one cause of mortality in NASH patients. In the main portion of the BALANCED study, EFX patients experienced improvements in glycemic control, including reductions in HbA1c of up to 0.9% among diabetic NASH patients. EFX patients also achieved highly significant relative reductions in liver fat of up to 72%, compared to 0% for placebo. Significant reductions in ALT (up to 51%), were also observed. Most importantly, additional analysis of the BALANCED study data showed substantial improvements in liver histology for EFX patients based on analysis of paired biopsies. Of the 40 EFX patients who had end-of-treatment biopsies, we observed that 48% achieved at least a one-stage improvement in fibrosis without worsening of NASH and 48% achieved

NASH resolution with no worsening of fibrosis. Among patients who had F2/F3 fibrosis at baseline, 68% had at least a 1-stage improvement in fibrosis, while 50% had a 2-stage fibrosis improvement. EFX was reported to be generally well tolerated. Across EFX groups, the most frequent adverse events were grade 1 or 2 gastrointestinal events, which were transient in nature.

### **Corporate History and Information**

We were incorporated in January 2017 under the laws of the State of Delaware under the name Pippin Pharmaceuticals, Inc. On May 16, 2018, we changed our name to Akeru Therapeutics, Inc. Our principal executive offices are located at 601 Gateway Boulevard, Suite 350, South San Francisco, CA 94080, and our telephone number is (650) 487-6488. Our website address is [www.akerotx.com](http://www.akerotx.com). The information contained in or accessible from our website is not incorporated into this prospectus, and you should not consider it part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

### **Implications of Being an Emerging Growth Company and a Smaller Reporting Company**

We qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, as amended, or the JOBS Act. As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of \$1.07 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of our initial public offering; (iii) the date on which we have issued more than \$1.0 billion in nonconvertible debt during the previous three years; or (iv) the last day of the fiscal year in which we are deemed to be a large accelerated filer under the rules of the SEC, which means the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th.

We are also a “smaller reporting company” as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies until the fiscal year following the determination that our voting and non-voting common stock held by non-affiliates is more than \$250 million measured on the last business day of our second fiscal quarter, or our annual revenues are more than \$100 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is more than \$700 million measured on the last business day of our second fiscal quarter.

## **USE OF PROCEEDS**

We intend to use the net proceeds from the sale of any securities offered under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus supplement. General corporate purposes may include research and development costs, including the conduct of one or more clinical trials and process development and manufacturing of our product candidate, working capital, capital expenditures and other general corporate purposes. We may temporarily invest the net proceeds in a variety of capital preservation instruments, including investment grade, interest bearing instruments and U.S. government securities, until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

## **SECURITIES WE MAY OFFER**

This prospectus contains summary descriptions of the securities we may offer from time to time. These summary descriptions are not meant to be complete descriptions of each security. The particular terms of any security will be described in the applicable prospectus supplement. This prospectus provides you with a general description of the securities we may offer. Each time we sell securities described herein, we will provide prospective investors with a supplement to this prospectus that will contain specific information about the terms of that offering, including the specific amounts, prices and terms of the securities offered.

We may sell the securities to or through underwriters, dealers or agents, directly to purchasers or through a combination of any of these methods of sale or as otherwise set forth below under “Plan of Distribution.” We, as well as any agents acting on our behalf, reserve the sole right to accept and to reject in whole or in part any proposed purchase of securities. Any prospectus supplement will set forth the names of any underwriters, dealers, agents or other entities involved in the sale of securities described in that prospectus supplement and any applicable fee, commission or discount arrangements with them.

## DESCRIPTION OF CAPITAL STOCK

*The following description of our common stock and preferred stock, together with the additional information we include in any applicable prospectus supplements, summarizes the material terms and provisions of the common stock and preferred stock that we may offer under this prospectus. The following description of our common stock and preferred stock does not purport to be complete and is subject to, and qualified in its entirety by, our amended and restated certificate of incorporation, or our charter, and amended and restated by-laws, or our by-laws, which are exhibits to the registration statement of which this prospectus forms a part, and by applicable law. The terms of our common stock and preferred stock may also be affected by Delaware law.*

### General

Our authorized capital stock consists of One Hundred Fifty Million (150,000,000) shares of common stock, par value \$0.0001 per share and Ten Million (10,000,000) shares of undesignated preferred stock, par value \$0.0001 per share.

### Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding convertible preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding convertible preferred stock.

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

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

### Preferred Stock

Our board of directors has the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. No shares of convertible preferred stock are outstanding, and we have no present plan to issue any shares of convertible preferred stock.

### Registration Rights

Certain holders of our common stock are entitled to rights with respect to the registration of these securities under the Securities Act. These rights are provided under the terms of an amended and restated investors’ rights agreement between us and holders of our previously outstanding convertible preferred stock. The amended and restated investors’ rights agreement includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses of underwritten registrations under this agreement will be borne by us and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

#### *Demand Registration Rights*

Certain holders of our common stock are entitled to demand registration rights. Under the terms of the amended and restated investors’ rights agreement, we will be required, upon the written request of a

majority of the holders of previously outstanding convertible preferred stock, to file a registration statement and use best efforts to effect the registration of all or a portion of these shares for public resale at an aggregate price of at least \$10.0 million. We are required to effect only one registration pursuant to this provision of the amended and restated investors' rights agreement.

#### *Short-Form Registration Rights*

Pursuant to the amended and restated investors' rights agreement, if we are eligible to file a registration statement on Form S-3, upon the written request of at least 20% of these holders to sell registrable securities at an aggregate price of at least \$5.0 million, we will be required to use commercially reasonable efforts to effect a registration of such shares. We are required to effect only one registration in any twelve-month period pursuant to this provision of the investors' rights agreement. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

#### *Piggyback Registration Rights*

Pursuant to the amended and restated investors' rights agreement, if we register any of our securities either for our own account or for the account of other security holders, the holders of these shares are entitled to include their shares in the registration. Subject to certain exceptions contained in the amended and restated investors' rights agreement, we and the underwriters may terminate or withdraw any registration initiated before the effective date of such registration in our sole discretion.

#### *Indemnification*

Our amended and restated investors' rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

#### *Expiration of Registration Rights*

The demand registration rights and short form registration rights granted under the investors' rights agreement will terminate on the third anniversary of the completion of our initial public offering or at such time after this offering when the holders' shares may be sold without restriction pursuant to Rule 144 within a three-month period.

### **Anti-Takeover Effects of Delaware Law and Provisions of our Charter and our By-laws**

#### *Provisions of our Charter and our By-laws*

Our charter and our by-laws include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

*Board Composition and Filling Vacancies.* Our certificate of incorporation provides for the division of our board of directors into three classes serving staggered three-year terms, with one class being elected each year. Our certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of two-thirds or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. The classification of directors, together with the limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

*No Written Consent of Stockholders.* Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the

amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholders without holding a meeting of stockholders.

*Meetings of Stockholders.* Our certificate of incorporation and bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

*Advance Notice Requirements.* Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our bylaws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

*Amendment to Charter and By-laws.* Any amendment of our certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, board composition, limitation of liability and certificate of incorporation must be approved by not less than two-thirds of the outstanding shares entitled to vote on the amendment, and not less than two-thirds of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of a majority of the outstanding shares entitled to vote on the amendment.

*Undesignated Preferred Stock.* Our certificate of incorporation provides for 10,000,000 authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

*Choice of Forum.* Our bylaws provide that, unless we consent in writing to the selection of an alternative form, the Court of Chancery of the State of Delaware (or, if the Chancery Court does not have jurisdiction, the federal district court for the District of Delaware or other state courts of the State of Delaware) will be the sole and exclusive forum for state law claims for (1) any derivative action or proceeding brought on our behalf; (2) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders; (3) any action asserting a claim against us, or any current or former director, officer, or other employee or stockholder, arising out of or pursuant to any provision of the General Corporation Law of the State of Delaware or our certificate of incorporation or bylaws; and (4) any action asserting a claim against us or any current or former director or officer or other employee governed by the internal affairs doctrine. The choice of forum provision does not apply to any causes of action arising under the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Our bylaws also provide that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this choice of forum provision. It is possible that a court of law could rule that the choice of forum



provision contained in our bylaws is inapplicable or unenforceable if it is challenged in a proceeding or otherwise. Additionally, the forum selection clause in our second amended and restated bylaws may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us.

*Section 203 of the Delaware General Corporation Law.* Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested 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 voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation; subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

## DESCRIPTION OF DEBT SECURITIES

We may offer debt securities which may be senior or subordinated. We refer to senior debt securities and subordinated debt securities collectively as debt securities. Each series of debt securities may have different terms. The following description summarizes the general terms and provisions of the debt securities. We will describe the specific terms of the debt securities and the extent, if any, to which the general provisions summarized below apply to any series of debt securities in the prospectus supplement relating to the series and any applicable free writing prospectus that we authorize to be delivered.

We may issue senior debt securities from time to time, in one or more series under a senior indenture to be entered into between us and a senior trustee to be named in a prospectus supplement, which we refer to as the senior trustee. We may issue subordinated debt securities from time to time, in one or more series, under a subordinated indenture to be entered into between us and a subordinated trustee to be named in a prospectus supplement, which we refer to as the subordinated trustee. The forms of senior indenture and subordinated indenture are filed as exhibits to the registration statement of which this prospectus forms a part. Together, the senior indenture and the subordinated indenture are referred to as the indentures and, together, the senior trustee and the subordinated trustee are referred to as the trustees. This prospectus briefly outlines some of the provisions of the indentures. The following summary of the material provisions of the indentures is qualified in its entirety by the provisions of the indentures, including definitions of certain terms used in the indentures. Wherever we refer to particular sections or defined terms of the indentures, those sections or defined terms are incorporated by reference in this prospectus or the applicable prospectus supplement. You should review the indentures that are filed as exhibits to the registration statement of which this prospectus forms a part for additional information. As used in this prospectus, the term “debt securities” includes the debt securities being offered by this prospectus and all other debt securities issued by us under the indentures.

### General

The indentures:

- do not limit the amount of debt securities that we may issue;
- allow us to issue debt securities in one or more series;
- do not require us to issue all of the debt securities of a series at the same time; and
- allow us to reopen a series to issue additional debt securities without the consent of the holders of the debt securities of such series.

Unless otherwise provided in the applicable prospectus supplement, the senior debt securities will be unsubordinated obligations and will rank equally with all of our other unsecured and unsubordinated indebtedness. Payments on the subordinated debt securities will be subordinated to the prior payment in full of all of our senior indebtedness, as described under “— Subordination” and in the applicable prospectus supplement.

Each indenture provides that we may, but need not, designate more than one trustee under an indenture. Any trustee under an indenture may resign or be removed and a successor trustee may be appointed to act with respect to the series of debt securities administered by the resigning or removed trustee. If two or more persons are acting as trustee with respect to different series of debt securities, each trustee shall be a trustee of a trust under the applicable indenture separate and apart from the trust administered by any other trustee. Except as otherwise indicated in this prospectus, any action described in this prospectus to be taken by each trustee may be taken by each trustee with respect to, and only with respect to, the one or more series of debt securities for which it is trustee under the applicable indenture.

The prospectus supplement for each offering will provide the following terms, where applicable:

- the title of the debt securities and whether they are senior or subordinated;
- any limit upon the aggregate principal amount of the debt securities of that series;
- the date or dates on which the principal of the debt securities of the series is payable;

- the price at which the debt securities will be issued, expressed as a percentage of the principal and, if 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 of ours or the method by which any such portion shall be determined;
- the rate or rates at which the debt securities of the series shall bear interest or the manner of calculation of such rate or rates, if any;
- the date or dates from which interest will accrue, the interest payment dates on which such interest will be payable or the manner of determination of such interest payment dates, the place(s) of payment, and the record date for the determination of holders to whom interest is payable on any such interest payment dates or the manner of determination of such record dates;
- the right, if any, to extend the interest payment periods and the duration of such extension;
- the period or periods within which, the price or prices at which and the terms and conditions upon which debt securities of the series may be redeemed, converted or exchanged, in whole or in part;
- our obligation, if any, to redeem or purchase debt securities of the series pursuant to any sinking fund, mandatory redemption, or analogous provisions (including payments made in cash in satisfaction of future sinking fund obligations) or at the option of a holder thereof and the period or periods within which, the price or prices at which, and the terms and conditions upon which, debt securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;
- the form of the debt securities of the series including the form of the Certificate of Authentication for such series;
- if other than minimum denominations of one thousand U.S. dollars (\$1,000) or any integral multiple of \$1,000 thereof, the denominations in which the debt securities of the series shall be issuable;
- whether the debt securities of the series shall be issued in whole or in part in the form of a global debt security or global debt securities; the terms and conditions, if any, upon which such global debt security or global debt securities may be exchanged in whole or in part for other individual debt securities; and the depository for such global debt security or global debt securities;
- whether the debt securities will be convertible into or exchangeable for common stock or other securities of ours or any other Person and, if so, 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, and the applicable conversion or exchange period;
- any additional or alternative events of default to those set forth in the indenture;
- any additional or alternative covenants to those set forth in the indenture;
- the currency or currencies including composite currencies, in which payment of the principal of (and premium, if any) and interest, if any, on such debt securities shall be payable (if other than the currency of the United States of America), which unless otherwise specified shall be the currency of the United States of America as at the time of payment is legal tender for payment of public or private debts;
- if the principal of (and premium, if any), or interest, if any, on such debt securities is to be payable, at our election or at the election of any holder thereof, in a coin or currency other than that in which such debt securities are stated to be payable, then the period or periods within which, and the terms and conditions upon which, such election may be made;
- 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;

- additional or alternative provisions, if any, related to defeasance and discharge of the offered debt securities than those set forth in the indenture;
- the applicability of any guarantees;
- any restrictions on transfer, sale or assignment of the debt securities of the series; and
- any other terms of the debt securities (which may supplement, modify or delete any provision of the indenture insofar as it applies to such series).

We may issue debt securities that provide for less than the entire principal amount thereof to be payable upon declaration of acceleration of the maturity of the debt securities. We refer to any such debt securities throughout this prospectus as “original issue discount securities.”

We will provide you with more information in the applicable prospectus supplement regarding any deletions, modifications, or additions to the events of default or covenants that are described below, including any addition of a covenant or other provision providing event risk or similar protection.

### **Payment**

Unless otherwise provided in the applicable prospectus supplement, the principal of, and any premium or make-whole amount, and interest on, any series of the debt securities will be payable by mailing a check to the address of the person entitled to it as it appears in the applicable register for the debt securities or by wire transfer of funds to that person at an account maintained within the United States.

All monies that we pay to a paying agent or a trustee for the payment of the principal of, and any premium, or interest on, any debt security will be repaid to us if unclaimed at the end of two years after the obligation underlying payment becomes due and payable. After funds have been returned to us, the holder of the debt security may look only to us for payment, without payment of interest for the period which we hold the funds.

### **Merger, Consolidation or Sale of Assets**

The indentures provide that we may, without the consent of the holders of any outstanding debt securities, (i) consolidate with, (ii) sell, lease or convey all or substantially all of our assets to, or (iii) merge with or into, any other entity provided that:

- either we are the continuing entity, or the successor entity, if other than us, assumes the obligations (a) to pay the principal of, and any premium, and interest on, all of the debt securities and (b) to duly perform and observe all of the covenants and conditions contained in the applicable indenture; and in the event the debt securities are convertible into or exchangeable for common stock or other securities of ours, such successor entity will, by such supplemental indenture, make provision so that the holders of debt securities of that series shall thereafter be entitled to receive upon conversion or exchange of such debt securities the number of securities or property to which a holder of the number of common stock or other securities of ours deliverable upon conversion or exchange of those debt securities would have been entitled had such conversion or exchange occurred immediately prior to such consolidation, merger, sale, conveyance, transfer or other disposition; and
- an officers’ certificate and legal opinion covering such conditions are delivered to each applicable trustee.

### **Events of Default, Notice and Waiver**

Unless the applicable prospectus supplement states otherwise, when we refer to “events of default” as defined in the indentures with respect to any series of debt securities, we mean:

- default in the payment of any installment of interest on any debt security of such series continuing for 90 days unless such date has been extended or deferred;
- default in the payment of principal of, or any premium on, any debt security of such series when due and payable unless such date has been extended or deferred;

- default in the performance or breach of any covenant or warranty in the debt securities or in the indenture by us continuing for 90 days after written notice described below;
- bankruptcy, insolvency or reorganization, or court appointment of a receiver, liquidator or trustee of us; and
- any other event of default provided with respect to a particular series of debt securities.

If an event of default (other than an event of default described in the fourth bullet point above) occurs and is continuing with respect to debt securities of any series outstanding, then the applicable trustee or the holders of 25% or more in principal amount of the debt securities of that series will have the right to declare the principal amount of, and accrued interest on, all the debt securities of that series to be due and payable. If an event of default described in the fourth bullet point above occurs, the principal amount of, and accrued interest on, all the debt securities of that series will automatically become and will be immediately due and payable without any declaration or other act on the part of the trustee or the holders of the debt securities. However, at any time after such a declaration of acceleration has been made, but before a judgment or decree for payment of the money due has been obtained by the applicable trustee, the holders of at least a majority in principal amount of outstanding debt securities of such series or of all debt securities then outstanding under the applicable indenture may rescind and annul such declaration and its consequences if:

- we have deposited with the applicable trustee all required payments of the principal, any premium, interest and, to the extent permitted by law, interest on overdue installment of interest, plus applicable fees, expenses, disbursements and advances of the applicable trustee; and
- all events of default, other than the non-payment of accelerated principal, or a specified portion thereof, and any premium, have been cured or waived.

The indentures provide that holders of debt securities of any series may not institute any proceedings, judicial or otherwise, with respect to such indenture or for any remedy under the indenture, unless the trustee fails to act for a period of 90 days after the trustee has received a written request to institute proceedings in respect of an event of default from the holders of 25% or more in principal amount of the outstanding debt securities of such series, as well as an offer of indemnity reasonably satisfactory to the trustee. However, this provision will not prevent any holder of debt securities from instituting suit for the enforcement of payment of the principal of, and any premium, and interest on, such debt securities at the respective due dates thereof.

The indentures provide that, subject to provisions in each indenture relating to its duties in the case of a default, a trustee has no obligation to exercise any of its rights or powers at the request or direction of any holders of any series of debt securities then outstanding under the indenture, unless the holders have offered to the trustee reasonable security or indemnity. The holders of at least a majority in principal amount of the outstanding debt securities of any series or of all debt securities then outstanding under an indenture shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the applicable trustee, or of exercising any trust or power conferred upon such trustee. However, a trustee may refuse to follow any direction which:

- is in conflict with any law or the applicable indenture;
- may involve the trustee in personal liability; or
- may be unduly prejudicial to the holders of debt securities of the series not joining the proceeding.

Within 120 days after the close of each fiscal year, we will be required to deliver to each trustee a certificate, signed by one of our several specified officers, stating whether or not that officer has knowledge of any default under the applicable indenture. If the officer has knowledge of any default, the notice must specify the nature and status of the default.

#### **Modification of the Indentures**

Subject to certain exceptions, the indentures may be amended with the consent of the holders of a majority in aggregate principal amount of the outstanding debt securities of all series affected by such amendment (including consents obtained in connection with a tender offer or exchange for the debt securities of such series).

We and the applicable trustee may make modifications and amendments of an indenture without the consent of any holder of debt securities for any of the following purposes:

- to cure any ambiguity, defect, or inconsistency in the applicable indenture or in the Securities of any series;
- to comply with the covenant described above under “— Merger, Consolidation or Sale of Assets”;
- to provide for uncertificated debt securities in addition to or in place of certificated debt securities;
- to add events of default for the benefit of the holders of all or any series of debt securities;
- to add the covenants, restrictions, conditions or provisions relating to us for the benefit of the holders of all or any series of debt securities (and if such covenants, restrictions, conditions or provisions are to be for the benefit of less than all series of debt securities, stating that such covenants, restrictions, conditions or provisions are expressly being included solely for the benefit of such series), 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 in the applicable indenture conferred upon us;
- 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 applicable indenture;
- to make any change that does not adversely affect the rights of any holder of notes under the applicable indenture 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 in the applicable indenture, to establish the form of any certifications required to be furnished pursuant to the terms of the applicable indenture or any series of debt securities under the applicable indenture, 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 the applicable indenture by a successor trustee or to appoint a separate trustee with respect to any series;
- to comply with any requirements of the SEC or any successor in connection with the qualification of the indenture under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act; or
- to conform the applicable indenture to this “— Description of Debt Securities” or any other similarly titled section in any prospectus supplement or other offering document relating to a series of debt securities.

#### **Subordination**

Payment by us of the principal of, premium, if any, and interest on any series of subordinated debt securities issued under the subordinated indenture will be subordinated to the extent set forth in an indenture supplemental to the subordinated indenture relating to such series.

#### **Discharge, Defeasance and Covenant Defeasance**

Unless otherwise provided in the applicable prospectus supplement, the indentures allow us to discharge our obligations to holders of any series of debt securities issued under any indenture when:

- either (i) all securities of such series have already been delivered to the applicable trustee for cancellation; or (ii) all securities of such series have not already been delivered to the applicable trustee for cancellation but (a) have become due and payable, (b) will become due and payable within one year, or (c) if redeemable at our option, are to be redeemed within one year, and we have irrevocably deposited with the applicable trustee, in trust, funds in such currency or currencies, or governmental obligations in an amount sufficient to pay the entire indebtedness on such debt securities in respect of principal and any premium, and interest to the date of such deposit if such debt securities have become due and payable or, if they have not, to the stated maturity or redemption date;

- we have paid or caused to be paid all other sums payable.

Unless otherwise provided in the applicable prospectus supplement, the indentures provide that, upon our irrevocable deposit with the applicable trustee, in trust, of an amount, in such currency or currencies in which such debt securities are payable at stated maturity, or government obligations, or both, applicable to such debt securities, which through the scheduled payment of principal and interest in accordance with their terms will provide money in an amount sufficient to pay the principal of, and any premium or make-whole amount, and interest on, such debt securities, and any mandatory sinking fund or analogous payments thereon, on the scheduled due dates therefor, the issuing company shall be released from its obligations with respect to such debt securities under the applicable indenture or, if provided in the applicable prospectus supplement, its obligations with respect to any other covenant, and any omission to comply with such obligations shall not constitute an event of default with respect to such debt securities.

The applicable prospectus supplement may further describe the provisions, if any, permitting such defeasance or covenant defeasance, including any modifications to the provisions described above, with respect to the debt securities of or within a particular series.

### **Conversion Rights**

The terms and conditions, if any, upon which the debt securities are convertible into common stock or other securities of ours will be set forth in the applicable prospectus supplement. The terms will include whether the debt securities are convertible into shares of common stock or other securities of ours, the conversion price, or manner of calculation thereof, the conversion period, provisions as to whether conversion will be at the issuing company's option or the option of the holders, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption of the debt securities and any restrictions on conversion.

### **Governing Law**

The indentures and the debt securities will be governed by and construed in accordance with the 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 supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement, which includes this prospectus.

### General

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 together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we will issue under a separate warrant agreement. We will enter into the warrant agreement with a warrant agent. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, 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;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- 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 agreement 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 periods during which, and places at which, the warrants are exercisable;
- the manner of exercise;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreement and warrants may be modified;
- federal income tax consequences 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.



## DESCRIPTION OF UNITS

We may issue units comprised of shares of common stock, shares of preferred stock, debt securities and/or warrants in any combination. We may issue units in such amounts and in as many distinct series as we wish. This section outlines certain provisions of the units that we may issue. If we issue units, they will be issued under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. The information described in this section may not be complete in all respects and is qualified entirely by reference to the unit agreement with respect to the units of any particular series. The specific terms of any series of units offered will be described in the applicable prospectus supplement. If so described in a particular prospectus supplement, the specific terms of any series of units may differ from the general description of terms presented below. We urge you to read any prospectus supplement related to any series of units we may offer, as well as the complete unit agreement and unit certificate that contain the terms of the units. If we issue units, forms of unit agreements and unit certificates relating to those units will be incorporated by reference as exhibits to the registration statement, which includes this prospectus.

Each unit that we may issue will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date. The applicable prospectus supplement may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement;
- the price or prices at which the units will be issued;
- the applicable United States federal income tax considerations relating to the units;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- any other terms of the units and of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock,” “Description of Debt Securities” and “Description of Warrants” will apply to the securities included in each unit, to the extent relevant based on the composition of the unit and as may be updated in any applicable prospectus supplements.

### **Issuance in Series**

We may issue units in such amounts and in as many distinct series as we wish. This section summarizes terms of the units that apply generally to all series. Most of the financial and other specific terms of a particular series of units will be described in the applicable prospectus supplement.

### **Unit Agreements**

We will issue the units under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. We may add, replace or terminate unit agents from time to time. We will identify the unit agreement under which each series of units will be issued and the unit agent under that agreement in the applicable prospectus supplement.

The following provisions will generally apply to all unit agreements unless otherwise stated in the applicable prospectus supplement:

*Modification without Consent*

We and the applicable unit agent may amend any unit or unit agreement without the consent of any holder:

- to cure any ambiguity, including modifying any provisions of the governing unit agreement that differ from those described below;
- to correct or supplement any defective or inconsistent provision; or
- to make any other change that we believe is necessary or desirable and will not adversely affect the interests of the affected holders in any material respect.

We do not need any approval to make changes that affect only units to be issued after the changes take effect. We may also make changes that do not adversely affect a particular unit in any material respect, even if they adversely affect other units in a material respect. In those cases, we do not need to obtain the approval of the holder of the unaffected unit; we need only obtain any required approvals from the holders of the affected units.

*Modification with Consent*

We may not amend any particular unit or a unit agreement with respect to any particular unit unless we obtain the consent of the holder of that unit, if the amendment would:

- impair any right of the holder to exercise or enforce any right under a security included in the unit if the terms of that security require the consent of the holder to any changes that would impair the exercise or enforcement of that right; or
- reduce the percentage of outstanding units or any series or class the consent of whose holders is required to amend that series or class, or the applicable unit agreement with respect to that series or class, as described below.

Any other change to a particular unit agreement and the units issued under that agreement would require the following approval:

- If the change affects only the units of a particular series issued under that agreement, the change must be approved by the holders of a majority of the outstanding units of that series; or
- If the change affects the units of more than one series issued under that agreement, it must be approved by the holders of a majority of all outstanding units of all series affected by the change, with the units of all the affected series voting together as one class for this purpose.

These provisions regarding changes with majority approval also apply to changes affecting any securities issued under a unit agreement, as the governing document.

In each case, the required approval must be given by written consent.

*Unit Agreements Will Not Be Qualified under Trust Indenture Act*

No unit agreement will be qualified as an indenture, and no unit agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of units issued under unit agreements will not have the protections of the Trust Indenture Act with respect to their units.

*Mergers and Similar Transactions Permitted; No Restrictive Covenants or Events of Default*

The unit agreements will not restrict our ability to merge or consolidate with, or sell our assets to, another corporation or other entity or to engage in any other transactions. If at any time we merge or consolidate with, or

sell our assets substantially as an entirety to, another corporation or other entity, the successor entity will succeed to and assume our obligations under the unit agreements. We will then be relieved of any further obligation under these agreements.

The unit agreements will not include any restrictions on our ability to put liens on our assets, nor will they restrict our ability to sell our assets. The unit agreements also will not provide for any events of default or remedies upon the occurrence of any events of default.

**Governing Law**

The unit agreements and the units will be governed by Delaware law.

**Form, Exchange and Transfer**

We will issue each unit in global — i.e., book-entry — form only. Units in book-entry form will be represented by a global security registered in the name of a depositary, which will be the holder of all the units represented by the global security. Those who own beneficial interests in a unit will do so through participants in the depositary's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depositary and its participants. We will describe book-entry securities, and other terms regarding the issuance and registration of the units in the applicable prospectus supplement.

Each unit and all securities comprising the unit will be issued in the same form.

If we issue any units in registered, non-global form, the following will apply to them.

The units will be issued in the denominations stated in the applicable prospectus supplement. Holders may exchange their units for units of smaller denominations or may request that their units be combined into fewer units of larger denominations, as long as the total amount of units held by a holder is not changed.

- Holders may exchange or transfer their units at the office of the unit agent. Holders may also replace lost, stolen, destroyed or mutilated units at that office. We may appoint another entity to perform these functions or perform them ourselves.
- Holders will not be required to pay a service charge to transfer or exchange their units, but they may be required to pay for any tax or other governmental charge associated with the transfer or exchange. The transfer or exchange, and any replacement, will be made only if our transfer agent is satisfied with the holder's proof of legal ownership. The transfer agent may also require an indemnity before replacing any units.
- If we have the right to redeem, accelerate or settle any units before their maturity, and we exercise our right as to less than all those units or other securities, we may block the exchange or transfer of those units during the period beginning 15 days before the day we mail the notice of exercise and ending on the day of that mailing, in order to freeze the list of holders to prepare the mailing. We may also refuse to register transfers of or exchange any unit selected for early settlement, except that we will continue to permit transfers and exchanges of the unsettled portion of any unit being partially settled. We may also block the transfer or exchange of any unit in this manner if the unit includes securities that are or may be selected for early settlement.

Only the depositary will be entitled to transfer or exchange a unit in global form, since it will be the sole holder of the unit.

**Payments and Notices**

In making payments and giving notices with respect to our units, we will follow the procedures as described in the applicable prospectus supplement.

## PLAN OF DISTRIBUTION

We may sell the securities offered through this prospectus and any accompanying prospectus supplement, if required, in any of the following ways: (i) to or through underwriters or dealers, (ii) directly to purchasers, including our affiliates, (iii) through agents, or (iv) through a combination of any of these methods. The securities may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices, either:

- on or through the facilities of The Nasdaq Global Select Market or any other securities exchange or quotation or trading service on which such securities may be listed, quoted or traded at the time of sale; and/or
- to or through a market maker otherwise than on The Nasdaq Global Select Market or such other securities exchanges or quotation or trading services.

In addition, we may issue the securities as a dividend or distribution or in a subscription rights offering to our existing security holders.

We may directly solicit offers to purchase securities, or agents may be designated to solicit such offers. In the prospectus supplement relating to such offering, we will name any agent that could be viewed as an underwriter under the Securities Act and describe any commissions that we must pay to any such agent. Any such agent will be acting on a best efforts basis for the period of its appointment or, if indicated in the applicable prospectus supplement, on a firm commitment basis. This prospectus may be used in connection with any offering of our securities through any of these methods or other methods described in the applicable prospectus supplement.

Each prospectus supplement will describe the method of distribution of the securities and any applicable restrictions.

The prospectus supplement with respect to the securities of a particular series will describe the terms of the offering of the securities, including the following:

- the name of the agent or any underwriters;
- the public offering or purchase price;
- any discounts and commissions to be allowed or paid to the agent or underwriters;
- all other items constituting underwriting compensation;
- any discounts and commissions to be allowed or paid to dealers; and
- any exchanges on which the securities will be listed.

If any underwriters or agents are used in the sale of the securities in respect of which this prospectus is delivered, we will enter into an underwriting agreement, sales agreement or other agreement with them at the time of sale to them, and we will set forth in the prospectus supplement relating to such offering the names of the underwriters or agents and the terms of the related agreement with them.

In connection with the offering of securities, we may grant to the underwriters an option to purchase additional securities with an additional underwriting commission, as may be set forth in the accompanying prospectus supplement. If we grant any such option, the terms of such option will be set forth in the prospectus supplement for such securities.

If a dealer is used in the sale of the securities in respect of which the prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer, who may be deemed to be an “underwriter” as that term is defined in the Securities Act, may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale.

If we offer securities in a subscription rights offering to our existing security holders, we may enter into a standby underwriting agreement with dealers, acting as standby underwriters. We may pay the standby underwriters a commitment fee for the securities they commit to purchase on a standby basis. If we do not enter into a standby underwriting arrangement, we may retain a dealer-manager to manage a subscription rights offering for us.

Agents, underwriters, dealers and other persons may be entitled under agreements which they may enter into with us to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, and may be customers of, engage in transactions with or perform services for us in the ordinary course of business.

If so indicated in the applicable prospectus supplement, we will authorize underwriters or other persons acting as our agents to solicit offers by certain institutions to purchase securities from us pursuant to delayed delivery contracts providing for payment and delivery on the date stated in the prospectus supplement. Each contract will be for an amount not less than, and the aggregate amount of securities sold pursuant to such contracts shall not be less nor more than, the respective amounts stated in the prospectus supplement. Institutions with whom the contracts, when authorized, may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and other institutions, but shall in all cases be subject to our approval. Delayed delivery contracts will not be subject to any conditions except that:

- the purchase by an institution of the securities covered under that contract shall not at the time of delivery be prohibited under the laws of the jurisdiction to which that institution is subject; and
- if the securities are also being sold to underwriters acting as principals for their own account, the underwriters shall have purchased such securities not sold for delayed delivery. The underwriters and other persons acting as our agents will not have any responsibility in respect of the validity or performance of delayed delivery contracts.

Offered securities may also be offered and sold, if so indicated in the prospectus supplement, in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise, by one or more remarketing firms, acting as principals for their own accounts or as agents for us. Any remarketing firm will be identified and the terms of its agreement, if any, with us and its compensation will be described in the applicable prospectus supplement. Remarketing firms may be deemed to be underwriters in connection with their remarketing of offered securities.

Certain agents, underwriters and dealers, and their associates and affiliates, may be customers of, have borrowing relationships with, engage in other transactions with, or perform services, including investment banking services, for us or one or more of our respective affiliates in the ordinary course of business.

In order to facilitate the offering of the securities, any underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the securities or any other securities the prices of which may be used to determine payments on such securities. Specifically, any underwriters may over allot in connection with the offering, creating a short position for their own accounts. In addition, to cover overallocations or to stabilize the price of the securities or of any such other securities, the underwriters may bid for, and purchase, the securities or any such other securities in the open market. Finally, in any offering of the securities through a syndicate of underwriters, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of the securities above independent market levels. Any such underwriters are not required to engage in these activities and may end any of these activities at any time.

We may engage in at the market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement (or a post-effective amendment). In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this

prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. The applicable prospectus supplement may provide that the original issue date for your securities may be more than two scheduled business days after the trade date for your securities. Accordingly, in such a case, if you wish to trade securities on any date prior to the second business day before the original issue date for your securities, you will be required, by virtue of the fact that your securities initially are expected to settle in more than two scheduled business days after the trade date for your securities, to make alternative settlement arrangements to prevent a failed settlement.

The securities may be new issues of securities and may have no established trading market. The securities may or may not be listed on a national securities exchange. We can make no assurance as to the liquidity of or the existence of trading market for any of the securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

The anticipated date of delivery of offered securities will be set forth in the applicable prospectus supplement relating to each offer.

**LEGAL MATTERS**

Certain legal matters in connection with this offering will be passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Any underwriters will also be advised about the validity of the securities and other legal matters by their own counsel, which will be named in the prospectus supplement.

**EXPERTS**

The financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

**WHERE YOU CAN FIND MORE INFORMATION**

We are subject to the information requirements of the Exchange Act and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet ([www.sec.gov](http://www.sec.gov)). Copies of certain information filed by us with the SEC are also available on our website at [www.akerotx.com](http://www.akerotx.com). We have the authority to designate and issue more than one class or series of stock having various preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends, qualifications, and terms and conditions of redemption. See "Description of Capital Stock." We will furnish a full statement of the relative rights and preferences of each class or series of our stock which has been so designated and any restrictions on the ownership or transfer of our stock to any stockholder upon request and without charge. Written requests for such copies should be directed to Akero Therapeutics, Inc., 601 Gateway Boulevard, Suite 350, 3<sup>rd</sup> Floor, South San Francisco, CA; telephone: (650) 487-6488. Information contained on our website is not incorporated by reference into this prospectus and, therefore, is not part of this prospectus or any accompanying prospectus supplement.

This prospectus is part of a registration statement that we have filed with the SEC. Certain information in the registration statement has been omitted from this prospectus in accordance with SEC rules and regulations. For more detail about us and any securities that may be offered by this prospectus, you may examine the registration statement on Form S-3 and the exhibits filed with it at the locations listed in the previous paragraph. Please be aware that statements in this prospectus referring to a contract or other document are summaries and you should refer to the exhibits that are part of the registration statement for a copy of the contract or document.



## INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is considered to be a part of this prospectus, and the information that we file later with the SEC will automatically update and, where applicable, supersede the information already incorporated by reference. We are incorporating by reference the documents listed below, which we have already filed with the SEC, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any future report or document that is not deemed filed under such provisions until we sell all of the securities.

- [Annual Report on Form 10-K for the year ended December 31, 2020 filed with the SEC on March 16, 2021](#);
- Current Reports on Form 8-K filed with the SEC on [March 22, 2021](#), [March 23, 2021](#), [April 13, 2021](#), and [April 26, 2021](#);
- [The information specifically incorporated by reference in our Annual Report on Form 10-K for the year ended December 31, 2020](#), from our Definitive Proxy Statement on Schedule 14(a), as filed with the SEC on April 27, 2021;
- [Quarterly Report on Form 10-Q, as filed with the SEC on May 13, 2021](#); and
- [the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on June 17, 2019](#) under Section 12(b) of the Exchange Act, including any amendments or reports filed for the purpose of updating such description.

Notwithstanding the foregoing, unless specifically stated to the contrary, information that we furnish (and that is not deemed “filed” with the SEC) under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, is not incorporated by reference into this prospectus or the registration statement of which this prospectus is a part.

Upon request, either orally or in writing, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, a copy of the documents incorporated by reference into this prospectus but not delivered with the prospectus. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing us at the following address: Aker Therapeutics, Inc., 601 Gateway Boulevard, Suite 350, South San Francisco, California 94080 or calling us at (650) 487-6488.

You may also access these documents, free of charge on the SEC’s website at [www.sec.gov](http://www.sec.gov) or on our website at [www.akerotx.com](http://www.akerotx.com). Information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information on, or that can be accessed from, our website as part of this prospectus or any accompanying prospectus supplement.

This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

You should rely only on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized anyone 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 or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.



**Common Stock  
Preferred Stock  
Debt Securities  
Warrants  
Units**

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**PROSPECTUS**

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**May 18, 2021**

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## PROSPECTUS



Up to \$100,000,000

### Common Stock

We have entered into a distribution agreement, or the Distribution Agreement, with J.P. Morgan Securities LLC (which we refer to as the “Sales Agent”), relating to shares of our common stock, par value \$0.0001 per share, offered by this prospectus. In accordance with the terms of the Distribution Agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to \$100,000,000 from time to time through the Sales Agent. Sales of the shares of common stock, if any, may be made on The Nasdaq Global Select Market at market prices and such other sales as agreed upon by us and the Sales Agent, as the case may be.

Our common stock is listed on The Nasdaq Global Select Market under the symbol “AKRO”. On May 12, 2021 the closing price of our common stock, as reported on The Nasdaq Global Select Market, was \$27.50 per share.

Sales of our common stock, if any, under this prospectus will be made in sales deemed to be an “at the market offering” as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, or the Securities Act. The Sales Agent is not required to sell any specific number or dollar amount of securities, but will use commercially reasonable efforts to sell on our behalf all of the shares of common stock requested to be sold by us, consistent with their normal trading and sales practices, on mutually agreed terms between the Sales Agent and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The Sales Agent will be entitled to compensation at a fixed commission rate of 3.0% of the gross sales price of common stock sold under the Distribution Agreement. See “Plan of Distribution” beginning on page [S-18](#) for additional information regarding the compensation to be paid to the Sales Agent. In connection with the sale of the common stock on our behalf, the Sales Agent may be deemed to be an “underwriter” within the meaning of the Securities Act and the compensation of the Sales Agent may be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to the Sales Agent with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended, or the Exchange Act.

We are an emerging growth company as that term is used in the Jumpstart Our Business Startups Act of 2012 and, as such, have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings.

**Investing in our common stock involves a high degree of risk. You should review carefully the risks and uncertainties referenced under the heading “Risk Factors” on page [S-7](#) of this prospectus and 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.**

**J.P. Morgan**

Prospectus dated May 18, 2021

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We are responsible for the information contained and incorporated by reference in this prospectus and in any related free writing prospectus we prepare or authorize. We have not authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the securities offered by this documentation are unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this document does not extend to you. The information contained in this document speaks only as of the date of this document, unless the information specifically indicates that another date applies. Our business, financial condition, results of operations and prospects may have changed since those dates.

## ABOUT THIS PROSPECTUS

This prospectus is part of an automatic shelf registration statement that we filed with the Securities and Exchange Commission, or the SEC, as a “well-known seasoned issuer” as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act. Under the shelf registration, we and/or selling stockholders may offer shares of our common stock and preferred stock, various series of warrants to purchase common stock or preferred stock, debt securities or any combination thereof, from time to time in one or more offerings.

If the information contained in this prospectus differs or varies from the information contained in any document incorporated by reference herein that was filed with the SEC before the date of this prospectus, you should rely on the information set forth in this prospectus. If any statement in one of these documents is inconsistent with a statement in another document having a later date (for example, a subsequently filed document deemed incorporated by reference in this prospectus), the statement in the document having the later date modifies or supersedes the earlier statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You should rely only on the information contained or incorporated by reference in this prospectus. We have not, and the Sales Agent has not, authorized anyone to provide you with information that is in addition to or different from that contained or incorporated by reference in this prospectus or contained in any permitted free writing prospectuses we have authorized for use in connection with this offering. We and the Sales Agent take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide.

The information contained in this prospectus and the documents incorporated by reference herein is accurate only as of their respective dates, regardless of the time of delivery of any such document or the time of any sale of our common stock. 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 in making your investment decision. You should read this prospectus, as well as the documents incorporated by reference herein, the additional information described under the section titled “Where You Can Find More Information” and “Incorporation of Certain Documents by Reference” in this prospectus and any free writing prospectus that we have authorized for use in connection with this offering, before investing in our common stock.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

We use various trademarks and trade names in our business, including without limitation our corporate name and logo. All other trademarks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. This prospectus and the documents incorporated by reference herein also contain estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus and the offering of our

common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of our common stock and the distribution of this prospectus outside the United States. This prospectus does not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

As used in this prospectus, unless the context otherwise requires, references to the “company,” “Akerio,” “we,” “us” and “our” refer to Akerio Therapeutics, Inc. and, where appropriate, our subsidiary.

## PROSPECTUS SUMMARY

*This summary highlights selected information about us and this offering and does not contain all of the information that you should consider before investing in our securities. Before investing in our common stock, you should carefully read the information contained and incorporated by reference in this prospectus, including the sections titled “Risk Factors” and the financial statements and accompanying notes.*

### Company Overview

We are a cardio-metabolic nonalcoholic steatohepatitis, or NASH, company dedicated to developing pioneering medicines designed to restore metabolic balance and improve overall health. Our lead product candidate, efruxifermin, or EFX, is an analog of fibroblast growth factor 21, or FGF21, which is an endogenously expressed hormone that protects against cellular stress and regulates metabolism of lipids, carbohydrates and proteins throughout the body. We conducted a Phase 2a clinical trial, the BALANCED study, to evaluate EFX in the treatment of biopsy-confirmed NASH patients. The main portion of this study in NASH patients with F1-F3 fibrosis showed EFX’s potential to reverse fibrosis, reduce liver fat, improve liver health, improve glycemic control and reduce risks of cardiovascular disease. In February we began screening for a Phase 2b clinical trial, the HARMONY study, to evaluate EFX in the treatment of NASH patients with F2/F3 fibrosis. Preliminary results of the HARMONY study, expected in the third quarter of 2022, will inform dose selection for a registrational Phase 3 clinical trial. An expansion cohort of the BALANCED study, Cohort C, evaluating EFX in the treatment of NASH patients with cirrhosis (F4), for which we reported data on March 22, 2021, showed EFX’s potential to reverse fibrosis in patients at greatest risk of progressing to liver failure. We plan to initiate a Phase 2b clinical trial, the SYMMETRY study, in the second half of 2021. Based on clinical data to date, we believe EFX has the potential to be a highly differentiated, potentially best-in-class FGF21 analog and foundational NASH monotherapy for each of the F2/F3 and F4 NASH populations.

The rapidly rising prevalence of NASH is driven by the global obesity epidemic. Poor diet and lack of exercise lead to caloric overburdening of the liver and accumulation of excessive liver fat. In patients with NASH, excessive liver fat leads to hepatocyte stress, which triggers localized inflammation and, as disease progresses, can lead to fibrosis and ultimately cirrhosis. According to a study published in *Hepatology* (2018), the prevalence of NASH in the United States is projected to increase from an estimated 17.3 million in 2016 to 27.0 million by 2030. In particular, the prevalence of patients with advanced fibrosis in the United States is projected to more than double between 2016 and 2030. NASH is the liver manifestation of metabolic syndrome and is frequently associated with insulin resistance and T2D. Additionally, patients with NASH have high rates of cardiovascular-related events, such as stroke and heart attack, with cardiovascular disease being the leading cause of death in patients with NASH. There are currently no approved therapies for NASH, while emerging potential NASH therapies in late-stage clinical development have shown limited efficacy or may be limited by unwanted side effects.

### *Emerging EFX therapeutic profile*

We are now developing EFX for the treatment of two distinct patient populations: (1) patients with compensated cirrhosis (F4) and (2) patients with pre-cirrhotic NASH (F2/F3). We recently reported that 7 of 12 (58%) EFX-treated patients with cirrhotic NASH who had end-of-treatment biopsies achieved either a one-stage improvement without worsening of NASH or NASH resolution, compared with 0 of 5 (0%) for placebo. 4 of 12 (33%) EFX patients achieved at least a 1-stage improvement of fibrosis and no worsening of NASH, compared with 0 of 5 (0%) for placebo. A separate 3 of 12 (25%) EFX patients achieved NASH resolution, compared with 0 of 5 (0%) for placebo. These results set EFX apart: prior to the results of Cohort C, there were no public reports of histologic improvement in treating cirrhotic NASH patients, after adjusting for placebo, for any other single investigational drug product.

Results from Cohort C build on a strong foundation. EFX has been administered to a total of 162 adult patients with either NASH (n=79) or T2D (n=83) in three randomized, double-blind, placebo-controlled clinical trials for up to 16 weeks. In all three trials, patients treated with EFX achieved highly statistically significant improvements in lipoprotein profile, including reduction in triglycerides of up to 45%, a key attribute given that cardiovascular disease remains the number one cause of mortality in NASH patients. In the main portion of the BALANCED study, EFX patients experienced improvements in glycemic

control, including reductions in HbA1c of up to 0.9% among diabetic NASH patients. EFX patients also achieved highly significant relative reductions in liver fat of up to 72%, compared to 0% for placebo. Significant reductions in ALT (up to 51%), were also observed. Most importantly, additional analysis of the BALANCED study data showed substantial improvements in liver histology for EFX patients based on analysis of paired biopsies. Of the 40 EFX patients who had end-of-treatment biopsies, we observed that 48% achieved at least a one-stage improvement in fibrosis without worsening of NASH and 48% achieved NASH resolution with no worsening of fibrosis. Among patients who had F2/F3 fibrosis at baseline, 68% had at least a 1-stage improvement in fibrosis, while 50% had a 2-stage fibrosis improvement. EFX was reported to be generally well tolerated. Across EFX groups, the most frequent adverse events were grade 1 or 2 gastrointestinal events, which were transient in nature.

### **Company Information**

We were incorporated in January 2017 under the laws of the State of Delaware under the name Pippin Pharmaceuticals, Inc. On May 16, 2018, we changed our name to Akero Therapeutics, Inc. Our principal executive offices are located at 601 Gateway Boulevard, Suite 350, South San Francisco, CA 94080, and our telephone number is (650) 487-6488. Our website address is [www.akerotx.com](http://www.akerotx.com). The information contained in or accessible from our website is not incorporated into this prospectus, and you should not consider it part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

### **Implications of Being an Emerging Growth Company**

As a company with less than \$1.07 billion in revenue during our most recently completed fiscal year, we qualify as an “emerging growth company” as defined in Section 2(a) of the Securities Act of 1933, as amended, or the Securities Act, as modified by the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable, in general, to public companies that are not emerging growth companies. These provisions include:

- reduced disclosure about our executive compensation arrangements;
- exemption from the non-binding stockholder advisory votes on executive compensation or golden parachute arrangements; and
- exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We may take advantage of these exemptions for up to five years following the completion of our IPO or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company if we have more than \$1.07 billion in annual revenues as of the end of a fiscal year; we are deemed to be a “large accelerated filer,” under the rules of the SEC, which means the market value of our equity securities that is held by non-affiliates exceeds \$700 million as of the prior June 30th; or if we issue more than \$1.0 billion of non-convertible debt over a three-year-period. We may choose to take advantage of some, but not all, of the available exemptions.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have elected not to “opt out” of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we will adopt the new or revised standard at the time private companies adopt the new or revised standard and will do so until such time that we either (i) irrevocably elect to “opt out” of such extended transition period or (ii) no longer qualify as an emerging growth company. While we have not made such an irrevocable election, we have not delayed the adoption of any applicable accounting standards.



## THE OFFERING

<b>Common stock offered by us:</b>	Shares of our common stock having an aggregate offering price of up to \$100,000,000.
<b>Common stock to be outstanding immediately after this offering:</b>	Up to 38,406,682 shares (as more fully described in the notes following this table), assuming sales of 3,636,363 shares of our common stock in this offering at an offering price of \$27.50 per share, which was the last reported sale price of our common stock on The Nasdaq Global Select Market on May 12, 2021. The actual number of shares issued will vary depending on how many shares of our common stock we choose to sell and the prices at which such sales occur.
<b>Plan of Distribution:</b>	“At the market offering” that may be made from time to time on The Nasdaq Global Select Market or other existing trading market for our common stock through our sales agent, J.P. Morgan Securities LLC. See “Plan of Distribution” on page <a href="#">S-18</a> of this prospectus.
<b>Use of Proceeds:</b>	Our management will retain broad discretion regarding the allocation and use of the net proceeds. We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and marketable securities, for clinical development of efruxifermin, manufacturing to support our future clinical trials, potential in-licensing to diversify our pipeline, and the remainder for working capital and other general corporate purposes. See “Use of Proceeds” on page <a href="#">S-15</a> of this prospectus.
<b>Risk Factors:</b>	Investing in our common stock involves significant risks. See “Risk Factors” on page <a href="#">S-7</a> of this prospectus and under similar headings in the documents incorporated by reference into this prospectus for a discussion of the factors you should carefully consider before deciding to invest in our common stock.
<b>The Nasdaq Global Select Market symbol:</b>	“AKRO”

All information in this prospectus related to the number of shares of our common stock to be outstanding immediately after this offering is based on 34,770,319 shares of our common stock outstanding as of March 31, 2021. The number of shares outstanding as of March 31, 2021 as used throughout this prospectus, unless otherwise indicated, excludes:

- 3,877,705 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2021 at a weighted-average exercise price of \$12.85 per share;
- 3,344,146 shares of common stock reserved for future issuance as of March 31, 2021 under our 2019 Stock Option and Incentive Plan; and
- 891,379 shares of common stock reserved for the future issuance as of March 31, 2021 under our 2019 Employee Stock Purchase Plan.

Unless otherwise stated, all information contained in this prospectus assumes no exercise of stock options after March 31, 2021 and reflects an assumed public offering price of \$27.50, which was the last reported sale price of our common stock on The Nasdaq Global Select Market on May 12, 2021.

## RISK FACTORS

*Investing in our common stock involves a high degree of risk. Before making an investment decision, you should carefully consider the risks described below and in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, as well as any amendments thereto reflected in subsequent filings with the SEC, each of which are incorporated by reference in this prospectus, and all of the other information in this prospectus, including our financial statements and related notes incorporated by reference herein. If any of these risks is realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the trading price of our common stock could decline and you could lose part or all of your investment. Additional risks and uncertainties that are not yet identified or that we currently believe to be immaterial may also materially harm our business, financial condition, results of operations and prospects and could result in a complete loss of your investment.*

### **Risks Related To This Offering and Our Common Stock**

***The price of our common stock historically has been volatile, which may affect the price at which you could sell any shares of our common stock.***

The market price for our common stock historically has been highly volatile and could continue to be subject to wide fluctuations in response to various factors. The market price for our common stock has varied between a high price of \$41.16 on July 8, 2020 and a low price of \$19.58 on May 13, 2021 in the twelve-month period ending on May 13, 2021. This volatility may affect the price at which you could sell the shares of our common stock, and the sale of substantial amounts of our common stock could adversely affect the price of our common stock. Our stock price is likely to continue to be volatile and subject to significant price and volume fluctuations in response to market and other factors, including:

- developments associated with our license with Amgen, including any termination or other change in our relationship with Amgen;
- the success of competitive products or technologies;
- regulatory actions with respect to our product candidate or any future product candidates or our competitors' product candidates or products;
- results of clinical trials of our product candidate or any future product candidates or those of our competitors;
- actual or anticipated changes in our growth rate relative to our competitors;
- announcements by us or our competitors or collaborators of significant acquisitions, strategic collaborations, joint ventures, collaborations or capital commitments;
- regulatory, legal or payor developments in the United States and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to any of our product candidate or any future product candidates or clinical development programs;
- the results of our efforts to in-license or acquire additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or our other stockholders;

- changes in the structure of healthcare payment systems;
- general economic, industry and market conditions, including the ongoing COVID-19 pandemic;
- market conditions in the pharmaceutical and biotechnology sectors; and
- general economic, industry and market conditions.

In addition, the stock market in general, and the market for biopharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. If the market price of our common stock does not exceed their purchase price, our stockholders may not realize any return on their investment in us and may lose some or all of their investment. In the past, securities class action litigation has often been instituted against companies following periods of volatility in the market price of a company's securities. This type of litigation, if instituted, could result in substantial costs and a diversion of management's attention and resources, which would harm our business, operating results or financial condition.

***We have broad discretion in the use of the net proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not yield a return on your investment.***

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section titled "Use of Proceeds," as well as our existing cash, and you will be relying on the judgment of our management regarding such application. You will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used effectively. Our management might not apply the net proceeds or our existing cash in ways that ultimately increase the value of your investment. If we do not invest or apply the net proceeds from this offering or our existing cash in ways that enhance stockholder value, we may fail to achieve expected results, which could cause our stock price to decline. Pending their use, we may invest the net proceeds from this offering in short-term U.S. Treasury securities with insignificant rates of return. These investments may not yield a favorable return to our stockholders.

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

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior at the time of sale. Assuming that an aggregate of 3,636,363 shares of our common stock are sold at a price of \$27.50 per share, the last reported sale price of our common stock on The Nasdaq Global Select Market on May 12, 2021, for aggregate gross proceeds of \$100.0 million, after deducting commissions and estimated offering expenses payable by us, investors in this offering would experience immediate dilution of \$18.59 per share, representing the difference between our as adjusted net tangible book value per share as of \$8.91, after giving effect to this offering, and the assumed offering price.

This dilution is due to the substantially lower price paid by some of our investors who purchased shares prior to this offering as compared to the price offered to the public in this offering and the exercise of stock options granted to our employees, directors and consultants. In addition, we have a significant number of stock options outstanding. The exercise of any of these outstanding options would result in further dilution. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. Further, because we expect we will need to raise additional capital to fund our future activities, we may in the future sell substantial amounts of common stock or securities convertible into or exchangeable for common stock.

Future issuances of common stock or common stock-related securities, together with the exercise of outstanding stock options, if any, may result in further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section titled "Dilution."

***Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.***

Additional capital will be needed in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

In addition, sales of a substantial number of shares of our outstanding common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. Persons who were our stockholders prior to our initial public offering continue to hold a substantial number of shares of our common stock that many of them are now able to sell in the public market. Significant portions of these shares are held by a relatively small number of stockholders. Sales by our stockholders of a substantial number of shares, or the expectation that such sales may occur, could significantly reduce the market price of our common stock.

***The actual number of shares we will issue under the Distribution Agreement, at any one time or in total, is uncertain.***

Subject to certain limitations in the Distribution Agreement and compliance with applicable law, we have the discretion to deliver a transaction proposal to any Sales Agent at any time throughout the term of the Distribution Agreement. The number of shares that are sold by any such Sales Agent after delivering a transaction proposal will fluctuate based on the market price of our common stock during the sales period and limits we set with such Sales Agent. Because the price per share of each share sold will fluctuate based on the market price of our common stock during the sales period, it is not possible at this stage to predict the number of shares that will be ultimately issued.

***The common stock offered hereby will be sold in “at the market offerings,” and investors who buy shares at different times will likely pay different prices.***

Investors who purchase shares in this offering at different times will likely pay different prices, and so may experience different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices, and numbers of shares sold, and there is no minimum or maximum sales price. Investors may experience a decline in the value of their shares as a result of share sales made at prices lower than the prices they paid.

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

As of May 12, 2021, our executive officers, directors, five percent or greater stockholders and their affiliates beneficially own approximately 58% of our outstanding voting stock. These stockholders will have the ability to influence us through their ownership positions. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders, acting together, may be able to control elections of directors or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may believe are in your best interest as one of our stockholders.

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

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that

such sales may have on the prevailing market price of our common stock. In addition, the sale of substantial amounts of our common stock could adversely impact its price. As of May 12, 2021, we had outstanding 34,826,078 shares of our common stock and options to purchase 3,862,646 shares of our common stock (of which 1,419,798 were exercisable as of that date). The sale or the availability for sale of a large number of shares of our common stock in the public market could cause the price of our common stock to decline.

***If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, our stock price and trading volume could decline.***

The trading market for our common stock will depend, in part, on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts may not publish an adequate amount of research on us, which may negatively impact the trading price for our stock. In addition, if one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. Further, if our operating results fail to meet the forecasts of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our stock could decrease, which might cause our stock price and trading volume to decline.

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

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

***We could be subject to securities class action litigation.***

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology and pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

***Changes in tax laws could adversely affect our business and financial condition.***

The rules dealing with U.S. federal, state and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect us or holders of our common stock. In recent years, many such changes have been made and changes are likely to continue to occur in the future. Future changes in tax laws could have a material adverse effect on our business, cash flow, financial condition or results of operations. We urge investors to consult with their legal and tax advisers regarding the implications of potential changes in tax laws on an investment in our common stock.

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

For so long as we remain an "emerging growth company" as defined in the JOBS Act, we may take advantage of certain exemptions from various requirements applicable to public companies that are not "emerging growth companies" including:

- the provisions of Section 404(b) of the Sarbanes-Oxley Act requiring that our independent registered public accounting firm provide an attestation report on the effectiveness of our internal control over financial reporting;

- the “say on pay” provisions (requiring a non-binding shareholder vote to approve compensation of certain executive officers) and the “say on golden parachute” provisions (requiring a non-binding shareholder vote to approve golden parachute arrangements for certain executive officers in connection with mergers and certain other business combinations) of the Dodd-Frank Act and some of the disclosure requirements of the Dodd-Frank Act relating to compensation of our executive officers; and
- the requirement to provide detailed compensation discussion and analysis in proxy statements and reports filed under the Exchange Act and instead provide a reduced level of disclosure concerning executive compensation.

We may take advantage of these reporting exemptions until we are no longer an emerging growth company, which in certain circumstances could be for up to five years. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of the IPO (b) in which we have total annual gross revenue of at least \$1.07 billion or (c) in which we are deemed to be a large accelerated filer, which requires the market value of our common stock that is held by non-affiliates to exceed \$700.0 million as of the prior June 30th, and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

We are also a “smaller reporting company” as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies until the fiscal year following the determination that our voting and non-voting common stock held by non-affiliates is more than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenues are more than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is more than \$700.0 million measured on the last business day of our second fiscal quarter.

Although we are still evaluating the JOBS Act, we currently intend to take advantage of some, but not all, of the reduced regulatory and reporting requirements that will be available to us so long as we qualify as an “emerging growth company” and “smaller reporting company.” We have elected to avail ourselves of this exemption and, therefore, we are not subject to the same new or revised accounting standards as other public companies that are not emerging growth companies or smaller reporting companies. As a result, changes in rules of U.S. generally accepted accounting principles or their interpretation, the adoption of new guidance or the application of existing guidance to changes in our business could significantly affect our financial position and results of operations. In addition, our independent registered public accounting firm will not be required to provide an attestation report on the effectiveness of our internal control over financial reporting so long as we qualify as an “emerging growth company,” which may increase the risk that material weaknesses or significant deficiencies in our internal control over financial reporting go undetected. Likewise, so long as we qualify as a “smaller reporting company” or an “emerging growth company,” we may elect not to provide you with certain information, including certain financial information and certain information regarding compensation of our executive officers, that we would otherwise have been required to provide in filings we make with the SEC, which may make it more difficult for investors and securities analysts to evaluate our company. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock, and our stock price may be more volatile and may decline.

***We might not be able to utilize a significant portion of our net operating loss carryforwards and research and development tax credit carryforwards.***

As of December 31, 2020, we had U.S. federal and state net operating loss, or NOL, carryforwards of \$127.4 million and \$47.2 million, respectively and federal and state research and development tax credit carryforwards of \$2.4 million and \$0.4 million, respectively. If not utilized, such NOL carryforwards (other

than any federal NOL carryforwards arising in taxable years beginning after December 31, 2017) and research and development credits will expire at various dates beginning in 2037 and 2032, respectively. We do not anticipate generating revenue from sales of products for the foreseeable future, if ever, and we may never achieve profitability. These NOL and tax credit carryforwards could expire unused and be unavailable to offset future income tax liabilities. Under the current law, federal NOL carryforwards generated in tax years beginning after December 31, 2017 are not subject to expiration. However, utilization of NOL carryforwards generated in tax years beginning after December 31, 2020 are limited to a maximum of 80% of the taxable income for such year determined without regard to such NOL carryforwards. In addition, under Section 382 of the Code, the amount of benefits from our NOL carryforwards may be impaired or limited if we incur a cumulative ownership change of more than 50%, as interpreted by the U.S. Internal Revenue Service, over a three-year period. We experienced ownership changes on March 24, 2017, June 7, 2018 and July 8, 2020, and we may experience ownership changes again in the future, some of which may be outside our control. As a result, our use of federal NOL carryforwards could be limited. State NOL carryforwards may be similarly limited. Any such disallowances may result in greater tax liabilities than we would incur in the absence of such a limitation and any increased liabilities could adversely affect our business, results of operations, financial position and cash flows.

***The market price of our common stock may be adversely affected by market conditions affecting the stock markets in general, including price and trading fluctuations on The Nasdaq Global Select Market.***

Market conditions may result in volatility in the level of, and fluctuations in, market prices of stocks generally and, in turn, our common stock and sales of substantial amounts of our common stock in the market, in each case being unrelated or disproportionate to changes in our operating performance. Concerns over global stability and economic conditions in the U.S. and abroad have contributed to the extreme volatility of the markets, which may have an effect on the market price of our common stock.



## CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the information and documents incorporated by reference herein, contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as “may,” “will,” “could,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “projects,” “potential,” “continue,” and similar expressions, or the negative of these terms, or similar expressions. Accordingly, these statements involve estimates, assumptions, risks and uncertainties which could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this prospectus and the documents incorporated by reference herein, and in particular those factors referenced in the section “Risk Factors.”

This prospectus, any related free writing prospectus and the information and documents incorporated by reference herein contain forward-looking statements that are based on our management’s belief and assumptions and on information currently available to our management. These statements relate to future events or our future financial performance, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the success, cost and timing of our product development activities and clinical trials, including statements regarding the timing of initiation and completion of studies or trials and related preparatory work, the period during which the results of the trials will become available, and our research and development programs;
- our ability to complete enrollment in our ongoing Phase 2b clinical trial of EFX in NASH patients with F2/F3 fibrosis, known as the HARMONY study, including the ability to obtain data and maintain our expected timelines during the ongoing COVID-19 pandemic;
- our ability to submit information to regulatory authorities that supports initiation of our planned Phase 2b clinical trial of EFX in cirrhotic NASH patients with F4 fibrosis, known as the SYMMETRY study, during the ongoing COVID-19 pandemic;
- the potential for COVID-19 or other pandemic, epidemic or outbreak of an infectious disease, including COVID-19, to disrupt our business plans, product development activities, ongoing clinical trials, including the timing and enrollment of patients, the health of our employees and the strength of our supply chain;
- our ability to advance any product candidate into or successfully complete any clinical trial;
- our ability to successfully manufacture our product candidates for future clinical trials or for commercial use, if approved;
- the potential for our identified research priorities to advance our technologies;
- our ability to obtain and maintain regulatory approval, if obtained, of EFX or any future product candidates, and any related restrictions, limitations and/or warnings in the label of an approved product candidate;
- the ability to license additional intellectual property relating to any future product candidates and to comply with our existing license agreement;
- our ability to commercialize our products in light of the intellectual property rights of others;
- the success of competing therapies that are or become available;
- our ability to obtain funding for our operations, including funding necessary to complete further development and commercialization of our product candidates;
- the commercialization of our product candidates, if approved;
- our plans to research, develop and commercialize our product candidates;

- our ability to attract collaborators with development, regulatory and commercialization expertise;
- future agreements with third parties in connection with the commercialization of our product candidates and any other approved product;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- the rate and degree of market acceptance of our product candidates;
- regulatory developments in the United States and foreign countries;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- our ability to attract and retain key scientific or management personnel;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- the impact of laws and regulations; and
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates.

These forward-looking statements are neither promises nor guarantees of future performance due to a variety of risks and uncertainties, many of which are beyond our control, which could cause actual results to differ materially from those indicated by these forward-looking statements, including, without limitation the risk factors and cautionary statements described in other documents that we file from time to time with the SEC, specifically under “Item 1A: Risk Factors” and elsewhere in our most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K, and the section of the prospectus titled “Risk Factors.”

The forward-looking statements in this prospectus, any related free writing prospectus and the documents incorporated by reference represent our views as of their respective dates. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we assume no obligation to update or revise any forward-looking statements except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the dates on which they were made.

This prospectus, any related free writing prospectus and the documents incorporated by reference also contain estimates, projections and other information concerning our industry, our business, and the markets for certain diseases, including data regarding the estimated size of those markets, and the incidence and prevalence of certain medical conditions. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances reflected in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources.

### **USE OF PROCEEDS**

The amount of proceeds from this offering will depend upon the number of shares of our common stock sold and the market price at which they are sold. There can be no assurance that we will be able to sell any shares under or fully utilize the Distribution Agreement with the Sales Agent as a source of financing. Therefore, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time.

We intend to use the net proceeds from the sale of any securities offered under this prospectus for general corporate purposes unless otherwise indicated in the applicable prospectus. General corporate purposes may include research and development costs, including the conduct of one or more clinical trials and process development and manufacturing of our product candidate, working capital, capital expenditures and other general corporate purposes. We may temporarily invest the net proceeds in a variety of capital preservation instruments, including investment grade, interest bearing instruments and U.S. government securities, until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of net proceeds.

### **DIVIDEND POLICY**

We have never declared or paid cash dividends on our capital stock. We intend to retain all of our future earnings, if any, to finance the growth and development of our business. We do not intend to pay cash dividends to our stockholders in the foreseeable future.

## DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted to the extent of the difference between the public offering price per share of our common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after this offering. Our net tangible book value as of March 31, 2021 was approximately \$246.0 million, or approximately \$7.08 per share of common stock. Net tangible book value per share represents the amount of total tangible assets (total assets less intangible assets) less total liabilities, divided by the number of shares of our common stock outstanding as of March 31, 2021.

Dilution in net tangible book value per share to new investors participating in this offering represents the difference between the amount per share paid by purchasers in this offering and the as adjusted net tangible book value per share of our common stock immediately after giving effect to this offering. After giving effect to the assumed sale of 3,636,363 shares of our common stock in the aggregate amount of approximately \$100.0 million at an assumed offering price of \$27.50 per share, the last reported sale price of our common stock on May 12, 2021, and after deducting commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of March 31, 2021 would have been approximately \$342.4 million, or approximately \$8.91 per share of common stock. This represents an immediate increase in net tangible book value of \$1.83 per share of common stock to our existing stockholders and immediate dilution in net tangible book value of \$18.59 per share of common stock to investors participating in this offering at the assumed offering price.

Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the assumed public offering price per share paid by new investors. The following table illustrates this per share dilution:

Assumed offering price per share	\$27.50
Historical net tangible book value per share as of March 31, 2021	\$7.08
Increase in net tangible book value per share attributable to new investors participating in this offering	1.83
As adjusted net tangible book value per share as of March 31, 2021, after giving effect to this offering	8.91
Dilution per share to new investors participating in this offering	<u>\$18.59</u>

The table above assumes for illustrative purposes that an aggregate of 3,636,363 shares of our common stock are sold at a price of \$27.50 per share, the last reported sale price of our common stock on The Nasdaq Global Select Market on May 12, 2021, for aggregate gross proceeds of approximately \$100.0 million. The shares sold in this offering, if any, will be sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$27.50 per share shown in the table above, assuming all of our common stock in the aggregate amount of approximately \$100.0 million is sold at that price, would result in an increase to our as adjusted net tangible book value per share after the offering to be \$8.94 and an increase in dilution per share to new investors participating in this offering to \$1.86, after deducting commissions and estimated offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$27.5 per share shown in the table above, assuming all of our common stock in the aggregate amount of approximately \$100.0 million is sold at that price, would result in a decrease to our as adjusted net tangible book value per share after the offering to be \$8.88 and a decrease in dilution per share to new investors participating in this offering to \$1.80, after deducting commissions and estimated offering expenses payable by us. This information is supplied for illustrative purposes only, and will adjust based on the actual offering prices, the actual number of shares that we offer and sell in this offering and other terms of each sale of shares in this offering.

The information above and in the foregoing table is based upon 34,770,319 shares of our common stock outstanding as of March 31, 2021. The information above and in the foregoing table excludes:

- 3,877,705 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2021 at a weighted-average exercise price of \$12.85 per share;

- 3,344,146 shares of common stock reserved for future issuance as of March 31, 2021 under our 2019 Stock Option and Incentive Plan; and
- 891,379 shares of common stock reserved for the future issuance as of March 31, 2021 under our 2019 Employee Stock Purchase Plan.

In addition, we may choose to raise additional capital in the future through the sale of equity or convertible debt securities due to market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that any of our outstanding options are exercised, new options are issued under our equity incentive plans or we issue additional shares of common stock or other equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering.

## PLAN OF DISTRIBUTION

We have entered into a Distribution Agreement (which we refer to as the “Distribution Agreement”) with J.P. Morgan Securities LLC (which we refer to as the “Sales Agent”), under which we may issue and sell from time to time shares of our common stock having an aggregate gross offering price of up to \$100,000,000 through the Sales Agent. Sales of our common stock, if any, may be made in transactions that are deemed to be an “at the market offering,” as defined in Rule 415(a)(4) promulgated under the Securities Act, including sales made by means of ordinary brokers’ transactions on the Nasdaq Global Market at market prices.

The Sales Agent will offer our common stock subject to the terms and conditions of the Distribution Agreement on a daily basis or otherwise as agreed upon by us and the Sales Agent. We will designate the maximum amount of our common stock to be sold through the Sales Agent on a daily basis or otherwise determine such maximum amount together with the Sales Agent. Subject to the terms and conditions of the Distribution Agreement, the Sales Agent will use its commercially reasonable efforts to sell on our behalf the common stock we designate from time to time. We may instruct the Sales Agent not to sell our common stock if the sales cannot be effected at or above the price designated by us in any such instruction. The Sales Agent will not be obligated to use its commercially reasonable efforts to sell our common stock at any price below the designated price. We or the Sales Agent may suspend the offering of our common stock under the Distribution Agreement upon proper notice and subject to other conditions.

The Sales Agent will receive from us a commission of 3.0% of the gross sales price per share of our common stock for any shares sold through the Sales Agent under the Distribution Agreement. The remaining sales proceeds, after deducting any expenses payable by us and any transaction fees imposed by any governmental, regulatory or self-regulatory organization in connection with the sales, will represent our net proceeds for the sale of such shares.

The Sales Agent will provide written confirmation to us by the opening of trading on the Nasdaq Global Market on the trading day following each day on which shares of our common stock are sold by the Sales Agent for us under the Distribution Agreement. Each confirmation will include the number of shares sold, the gross sales price per share and the net proceeds to us.

Settlement for sales of our common stock will occur, unless the parties agree otherwise, on the second business day following the date on which any sales were made in return for payment of the net proceeds or gross sales price to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

Under the terms of the Distribution Agreement, we also may sell our common stock to the Sales Agent as principal for its own account, at a price agreed upon at the time of sale. If we sell shares to the Sales Agent as principal, we will enter into a separate terms agreement with the Sales Agent, and we will describe such agreement, including agreed commissions or discounts to the Sales Agent, in a separate prospectus supplement or pricing supplement.

We will report in a prospectus and/or our filings with the SEC under the Exchange Act of 1934, as amended (the “Exchange Act”), at least quarterly the number of shares of our common stock sold through the Sales Agent under the Distribution Agreement, the net proceeds to us and the compensation paid by us to the Sales Agent in connection with the sales of our common stock.

In connection with the sale of our common stock on our behalf, the Sales Agent may be deemed to be an “underwriter” within the meaning of the Securities Act, and the compensation paid to the Sales Agent may be deemed to be underwriting commissions or discounts. We have agreed in the Distribution Agreement to provide indemnification and contribution to the Sales Agent against certain civil liabilities, including liabilities under the Securities Act.

The Sales Agent and its affiliates have engaged in, and may in the future engage in, investment banking and other commercial dealings in the ordinary course of business with us or our affiliates. The Sales Agent has received, or may in the future receive, customary fees and commissions for these transactions.

In addition, in the ordinary course of its business activities, the Sales Agent and its affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative

securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers. Such investments and securities activities may involve securities and/or instruments of ours or our affiliates. The Sales Agent and its respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or financial instruments and may hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

If either the Sales Agent or we have reason to believe that the exemptive provisions set forth in Rule 101(c)(1) of Regulation M under the Exchange Act are not satisfied, that party will promptly notify the other and sales of our common stock under the Distribution Agreement will be suspended until that or other exemptive provisions have been satisfied in the judgment of the Sales Agent and us.

The offering of our common stock pursuant to the Distribution Agreement will terminate upon the earlier of (1) the sale of all shares of our common stock subject to the Distribution Agreement and (2) the termination of the Distribution Agreement by us and/or by the Sales Agent.

We estimate that the total expenses of the offering payable by us, excluding discounts and commissions and other amounts payable to the Sales Agent under the Distribution Agreement, will be approximately \$1,000,000. We have also agreed in certain circumstances to pay for the reasonable fees and disbursements of the Sales Agent in connection with the offering.

This prospectus in electronic format may be made available on a website maintained by the Sales Agent, and the Sales Agent may distribute this prospectus electronically.

## LEGAL MATTERS

Certain legal matters in connection with this offering and the validity of the securities offered by this prospectus will be passed upon for us by Goodwin Procter LLP, Boston, MA. J.P. Morgan Securities LLC is being represented in connection with this offering by Cooley LLP, New York, New York.

## EXPERTS

The financial statements incorporated in this prospectus by reference from the Company's [Annual Report on Form 10-K](#) have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement on Form S-3 that we have filed with the SEC. This prospectus, filed as part of the registration statement, does not contain all the information set forth in the registration statement and its exhibits and schedules, portions of which have been omitted as permitted by the rules and regulations of the SEC. For further information about us, we refer you to the registration statement and to its exhibits and schedules. Certain information in the registration statement has been omitted from this prospectus in accordance with the rules of the SEC.

We are subject to the reporting and information requirements of the Exchange Act and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. These documents also may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet ([www.sec.gov](http://www.sec.gov)). Written requests for such copies should be directed to Akerio Therapeutics, Inc., 601 Gateway Boulevard, Suite 350, South San Francisco, CA; telephone: (650) 487-6488 and our website is located at [www.akerotx.com](http://www.akerotx.com).

We have the authority to designate and issue more than one class or series of stock having various preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends, qualifications, and terms and conditions of redemption. See "Description of Capital Stock" in the accompanying base prospectus. We will furnish a full statement of the relative rights and preferences of each class or series of our stock which has been so designated and any restrictions on the ownership or transfer of our stock to any shareholder upon request and without charge. Information contained on our website is not incorporated by reference into this prospectus and, therefore, is not part of this prospectus or any accompanying prospectus.



## INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede the information already incorporated by reference. We are incorporating by reference the documents listed below, which we have already filed with the SEC, and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including all filings made after the date of this prospectus, except as to any portion of any future report or document that is not deemed filed under such provisions, until we sell all of the securities:

- [our Annual Report on Form 10-K for the year ended December 31, 2020 filed with the SEC on March 16, 2021;](#)
- the information specifically incorporated by reference into our [Annual Report on Form 10-K for the year ended December 31, 2020](#) from our [definitive proxy statement on Schedule 14A \(other than information furnished rather than filed\) filed with the SEC on April 27, 2021;](#)
- [our Quarterly Report on Form 10-Q for the quarter ended March 31, 2021, filed with the SEC on May 13, 2021;](#)
- our Current Reports on Form 8-K filed with the SEC (other than information furnished rather than filed) on [March 22, 2021](#), [March 23, 2021](#), [April 13, 2021](#), [April 26, 2021](#) and [May 13, 2021](#); and
- the description of our common stock contained in our registration statement on [Form 8-A filed with the SEC on June 17, 2019](#) under Section 12(b) of the Exchange Act, including any amendments or reports filed for the purpose of updating such description.

We incorporate by reference any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act between the date of this prospectus and the termination of the offering.

Notwithstanding the foregoing, unless specifically stated to the contrary, information that we furnish (and that is not deemed “filed” with the SEC) under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits under Item 9.01, is not incorporated by reference into this prospectus or the registration statement of which this prospectus is a part.

Any statement contained in a document that is incorporated by reference will be modified or superseded for all purposes to the extent that a statement contained in this prospectus, or in any other document that is subsequently filed with the SEC and incorporated by reference into this prospectus, modifies or is contrary to that previous statement. Any statement so modified or superseded will not be deemed a part of this prospectus, except as so modified or superseded. Since information that we later file with the SEC will update and supersede previously incorporated information, you should look at all of the SEC filings that we incorporate by reference to determine if any of the statements in this prospectus or in any documents previously incorporated by reference have been modified or superseded.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, a copy of the documents incorporated by reference into this prospectus but not delivered therewith. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing or telephoning us at the following address: Akero Therapeutics, Inc., 601 Gateway Boulevard, Suite 350, South San Francisco, California 94080 or calling us at (650) 487-6488.

You may also access these documents, free of charge on the SEC’s website at [www.sec.gov](http://www.sec.gov) or on our website at [www.akerotx.com](http://www.akerotx.com). Information contained on our website is not incorporated by reference into this prospectus and you should not consider any information on, or that can be accessed from, our website as part of this prospectus.

This prospectus is part of a registration statement we filed with the SEC. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone 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 or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.



**Up to \$100,000,000**

**Common Stock**

**PROSPECTUS**

**J.P. Morgan**

**May 18, 2021**

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## PART II-INFORMATION NOT REQUIRED IN PROSPECTUS

### Item 14. Other Expenses of Issuance and Distribution

The expenses payable by Akero in connection with the issuance and distribution of the securities being registered (other than underwriting discounts and commissions, if any) are set forth below. Each item listed is estimated, except for the Securities and Exchange Commission (the "SEC") registration fee and the FINRA filing fee.

SEC registration fee	\$	(1)
FINRA filing fee		225,500
Legal fees and expenses		*
Accounting fees and expenses		*
Printing fees and expenses		*
Transfer agent and trustee fees		*
Miscellaneous		*
Total	\$	(2)

\* These fees and expenses depend on the securities offered and the number of issuances and accordingly cannot be estimated at this time.

- (1) Pursuant to Rules 456(b) and 457(r) under the Securities Act of 1933, as amended, or the Securities Act, the registrant is deferring payment of the filing fees relating to the securities that are registered and available for sale under this registration statement other than the \$10,910 of fees due in connection with the \$100,000,000 of our common stock that may be issued and sold from time to time under a distribution agreement with J.P. Morgan Securities LLC.
- (2) This Registration Statement relates to an unspecified aggregate initial offering price or number of the securities of each class identified in the fee table on the cover page of this Registration Statement. Because these aggregate amounts are not known, the estimates provided above relate to the expenses of filing this Registration Statement. This expense estimate will appear with respect to each particular offering of securities in the 424(b) filing relating to such securities.

### Item 15. Indemnification of Directors and Officers

Section 145 of the Delaware General Corporation Law (the "DGCL") authorizes a corporation to indemnify its directors and officers against liabilities arising out of actions, suits and proceedings to which they are made or threatened to be made a party by reason of the fact that they have served or are currently serving as a director or officer to a corporation. The indemnity may cover expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the director or officer in connection with any such action, suit or proceeding. Section 145 permits corporations to pay expenses (including attorneys' fees) incurred by directors and officers in advance of the final disposition of such action, suit or proceeding. In addition, Section 145 provides that a corporation has the power to purchase and maintain insurance on behalf of its directors and officers against any liability asserted against them and incurred by them in their capacity as a director or officer, or arising out of their status as such, whether or not the corporation would have the power to indemnify the director or officer against such liability under Section 145.

We have adopted provisions in our amended and restated certificate of incorporation and amended and restated by-laws that limit or eliminate the personal liability of our directors to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;

- any unlawful payments related to dividends or unlawful stock purchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our amended and restated by-laws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the DGCL, as it now exists or may in the future be amended; and
- we will advance reasonable expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings relating to their service for or on behalf of us, subject to limited exceptions.

We have entered into indemnification agreements with each of our directors and with certain of our executive officers. These agreements provide that we will indemnify each of our directors, certain of our executive officers and, at times, their affiliates to the fullest extent permitted by Delaware law. We will advance expenses, including attorneys' fees (but excluding judgments, fines and settlement amounts), to each indemnified director, executive officer or affiliate in connection with any proceeding in which indemnification is available and we will indemnify our directors and officers for any action or proceeding arising out of that person's services as a director or officer brought on behalf of the Company and/or in furtherance of our rights. Additionally, each of our directors may have certain rights to indemnification, advancement of expenses and/or insurance provided by their affiliates, which indemnification relates to and might apply to the same proceedings arising out of such director's services as a director referenced herein. Nonetheless, we have agreed in the indemnification agreements that the Company's obligations to those same directors are primary and any obligation of the affiliates of those directors to advance expenses or to provide indemnification for the expenses or liabilities incurred by those directors are secondary.

We also maintain general liability insurance which covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended.

#### **Item 16. Exhibits**

A list of all exhibits filed with this registration statement on Form S-3 is set forth on the Exhibit Index and is incorporated herein by reference.

#### **Item 17. Undertakings**

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
  - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

- (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; *provided, however*, that paragraphs (l)(i), (l)(ii) and (l)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement;
  - (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof;
  - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;
  - (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
    - (i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
    - (ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof; *provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;
  - (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
    - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
    - (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
    - (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
    - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser;
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- (6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof;
- (7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue; and
- (8) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act of 1939 in accordance with the rules and regulations prescribed by the Securities and Exchange Commission under Section 305(b)(2) of the Trust Indenture Act of 1939.

## EXHIBIT INDEX

Exhibit number	Description
1.1**	Form of Underwriting Agreement
1.2*	<a href="#">Equity Distribution Agreement, dated as of May 18, 2021, between the Registrant and J.P. Morgan Securities LLC</a>
3.1	<a href="#">Amended and Restated Certificate of Incorporation of Registrant, as currently in effect, (incorporated by reference to Exhibit 3.1 of the Registrant's Current Report on Form 8-K (File No. 001-38944) filed on June 24, 2019).</a>
3.2	<a href="#">Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, as amended (File No. 001-38944) as filed with the SEC on March 12, 2021).</a>
4.1	<a href="#">Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 of the Registrant's Registration Statement on Form S-1/A (File No. 333-231747) filed on June 10, 2019).</a>
4.2	<a href="#">Amended and Restated Investors' Rights Agreement among the Registrant and certain of its stockholders, dated December 5, 2018 (incorporated by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-1 (File No. 333-231747) filed on May 24, 2019).</a>
4.3*	<a href="#">Form of Senior Indenture between Registrant and one or more trustees to be named</a>
4.4*	<a href="#">Form of Subordinated Indenture between Registrant and one or more trustees to be named</a>
4.5**	Form of Certificate of Designations of Preferred Stock
4.6**	Form of Warrant Agreement and Warrant Certificate
4.7**	Form of Unit Agreement and Unit Certificate
4.8**	Form of Preferred Stock Certificate
4.9	Reference is made to <a href="#">Exhibits 3.1</a> and <a href="#">3.2</a>
5.1*	<a href="#">Opinion of Goodwin Procter LLP.</a>
5.2*	<a href="#">Opinion of Goodwin Procter LLP, relating to distribution agreement prospectus</a>
23.1*	<a href="#">Consent of Deloitte &amp; Touche LLP, independent registered public accounting firm.</a>
23.2*	<a href="#">Consent of Goodwin Procter LLP (included in Exhibit 5.1).</a>
23.3*	<a href="#">Consent of Goodwin Procter LLP (included in Exhibit 5.2).</a>
24.1*	<a href="#">Power of Attorney (included on signature pages hereto).</a>
25.1***	Form of T-1 Statement of Eligibility of Trustee for Senior Indenture under the Trust Indenture Act of 1939
25.2***	Form of T-1 Statement of Eligibility of Trustee for Subordinated Indenture under the Trust Indenture Act of 1939

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\* Filed herewith.

\*\* To be filed, if necessary, by amendment or as an exhibit to a document to be incorporated or deemed to be incorporated by reference in this registration statement, including a Current Report on Form 8-K.

\*\*\* To be filed by amendment pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939.



**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of San Francisco, California, on this 18th day of May, 2021.

**AKERO THERAPEUTICS, INC.**By: /s/ Andrew Cheng

Andrew Cheng, M.D., Ph.D.  
President and Chief Executive Officer

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby severally constitutes and appoints each of Andrew Cheng, Jonathan Young, and William White and each of them singly, as such person's true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for such person and in such person's name, place and stead, in any and all capacities, to sign any or all amendments (including, without limitation, post-effective amendments) to this registration statement (or any registration statement for the same offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and all documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that any said attorney-in-fact and agent, or any substitute or substitutes of any of them, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

has been signed by the following person in the capacities and on the date indicated.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Andrew Cheng</u> Andrew Cheng, M.D., Ph.D.	Director, President, and Chief Executive Officer (Principal Executive Officer)	May 18, 2021
<u>/s/ William White</u> William White, J.D.	Executive Vice President, Chief Financial Officer and Head of Corporate Development (Principal Financial Officer and Principal Accounting Officer)	May 18, 2021
<u>/s/ Kevin Bitterman</u> Kevin Bitterman, Ph.D.	Director	May 18, 2021
<u>/s/ Seth L. Harrison</u> Seth L. Harrison, M.D.	Director	May 18, 2021
<u>/s/ Jane P. Henderson</u> Jane P. Henderson	Director	May 18, 2021
<u>/s/ Tomas J. Heyman</u> Tomas J. Heyman	Director	May 18, 2021
<u>/s/ Mark Iwicki</u> Mark Iwicki	Director, Chairperson	May 18, 2021

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Graham Walmsley</u> Graham Walmsley, M.D., Ph.D.	Director	May 18, 2021
<u>/s/ Yuan Xu</u> Yuan Xu, Ph.D.	Director	May 18, 2021

## DISTRIBUTION AGREEMENT

May 18, 2021

J.P. Morgan Securities LLC  
383 Madison Avenue  
New York, New York 10179

Ladies and Gentlemen:

Akero Therapeutics, Inc., a Delaware corporation (the “**Company**”), confirms its agreement with J.P. Morgan Securities LLC, as agent and/or principal under any Terms Agreement (as defined in Section 1(a) below) (“**you**” or the “**Agent**”), with respect to the issuance and sale from time to time by the Company, in the manner and subject to the terms and conditions described below in this Distribution Agreement (this “**Agreement**”), of Common Stock, \$0.0001 par value per share (the “**Common Stock**”), of the Company having an aggregate Gross Sales Price (as defined in Section 2(b) below) of up to \$100,000,000 (the “**Maximum Amount**”) on the terms set forth in Section 1 of this Agreement. Such shares are hereinafter collectively referred to as the “**Shares**” and are described in the Prospectus referred to below.

The Company has filed or will file with the Securities and Exchange Commission (the “**Commission**”) a registration statement on Form S-3 (the “**registration statement**”) for the registration of the Shares and other securities of the Company under the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder (collectively, the “**Act**”); and such registration statement sets forth the terms of the offering, sale and plan of distribution of the Shares and contains additional information concerning the Company and its business. Except where the context otherwise requires, “**Registration Statement**,” as used herein, means the registration statement, as amended at the time of such registration statement’s effectiveness for purposes of Section 11 of the Act, as such section applies to the Agent, including (1) all documents filed as a part thereof or incorporated or deemed to be incorporated by reference therein and (2) any information contained or incorporated by reference in a prospectus filed with the Commission pursuant to Rule 424(b) under the Act, to the extent such information is deemed, pursuant to Rule 430B or Rule 430C under the Act, to be part of the registration statement at the effective time. “**Basic Prospectus**” means the prospectus filed as part of the Registration Statement, including the documents incorporated by reference therein as of the date of such prospectus; “**Prospectus Supplement**” means the most recent prospectus supplement relating to the Shares, to be filed by the Company with the Commission pursuant to Rule 424(b) under the Act on or before the second business day after the date of its first use in connection with a public offering or sale of Shares pursuant hereto (or such earlier time as may be required under the Act), in the form furnished by the Company to the Agent in connection with the offering of the Shares; “**Prospectus**” means the Prospectus Supplement (and any additional prospectus supplement prepared in accordance with the provision of Section 4(h) of this Agreement and filed in accordance with the provisions of Rule 424(b)) together with the Basic Prospectus attached to or used with the Prospectus Supplement; and “**Permitted Free Writing Prospectus**” has the meaning set forth in Section 3(b). Any reference herein to the Registration Statement, the Basic Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus shall, unless otherwise stated, be deemed to refer to and include the documents, if any, incorporated by reference, or deemed to be incorporated by reference, therein (the “**Incorporated Documents**”), including, unless the context otherwise requires, the documents, if any, filed as exhibits to such Incorporated Documents. Any reference herein to the terms “amend,” “amendment” or “supplement” with respect to the Registration Statement, the Basic Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus shall, unless stated otherwise, be deemed to refer to and include the filing of any document under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (collectively, the “**Exchange Act**”) on or after the initial effective date of the Registration Statement, or the date of the Basic Prospectus, the Prospectus Supplement, the Prospectus or such Permitted Free Writing Prospectus, as the case may be, and deemed to be incorporated therein by reference. References in this Agreement to financial statements or other information that is “contained,” “included,” “described,” “set forth” or “provided” in the Registration Statement, the Basic Prospectus, the Prospectus Supplement, the Prospectus or any Permitted Free Writing Prospectus and any similar references shall, unless stated otherwise, include any information incorporated or deemed to be incorporated by reference therein.

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The Company and the Agent agree as follows:

1. Issuance and Sale.

(a) Upon the basis of the representations, warranties and agreements and subject to the terms and conditions set forth herein and provided the Company provides the Agent with any due diligence materials and information reasonably requested by the Agent necessary for the Agent to satisfy its due diligence obligations, on any Exchange Business Day (as defined below) selected by the Company, the Company and the Agent shall enter into an agreement in accordance with Section 2 hereof regarding the number of Shares to be placed by the Agent, as agent, and the manner in which and other terms upon which such placement is to occur (each such transaction being referred to as an “**Agency Transaction**”). The Company may also offer to sell the Shares directly to the Agent, as principal, in which event such parties shall enter into a separate agreement (each, a “**Terms Agreement**”) in substantially the form of Exhibit A hereto (with such changes thereto as may be agreed upon by the Company and the Agent to accommodate a transaction involving additional underwriters), relating to such sale in accordance with Section 2(g) of this Agreement (each such transaction being referred to as a “**Principal Transaction**”). As used herein, (i) the “**Term**” shall be the period commencing on the date hereof and ending on the earlier of (x) the date on which the aggregate Gross Sales Price of Shares issued and sold pursuant to this Agreement and any Terms Agreements equal to the Maximum Amount and (y) any termination of this Agreement pursuant to Section 8, (ii) an “**Exchange Business Day**” means any day during the Term that is a trading day for the Exchange other than a day on which trading on the Exchange is scheduled to close prior to its regular weekday closing time, and (iii) “**Exchange**” means the Nasdaq Global Select Market.

(b) Subject to the terms and conditions set forth below, the Company appoints the Agent as agent in connection with the offer and sale of Shares in any Agency Transactions entered into hereunder. The Agent will use commercially reasonable efforts, consistent with its normal trading and sales practices, to sell such Shares in accordance with the terms and subject to the conditions hereof and of the applicable Transaction Acceptance (as defined below). Neither the Company nor the Agent shall have any obligation to enter into an Agency Transaction. The Company shall be obligated to issue and sell through the Agent, and the Agent shall be obligated to use commercially reasonable efforts, consistent with its normal trading and sales practices and as provided herein and in the applicable Transaction Acceptance, to place Shares only if and when the Company makes a Transaction Proposal to the Agent related to such an Agency Transaction and a Transaction Acceptance related to such Agency Transaction has been delivered to the Company by the Agent as provided in Section 2 below.

(c) The Agent, as agent in any Agency Transaction, hereby covenants and agrees not to make any sales of the Shares on behalf of the Company pursuant to this Agreement other than (A) by means of ordinary brokers' transactions between members of the Exchange that qualify for delivery of a Prospectus in accordance with Rule 153 under the Act and meet the definition of an "at the market offering" under Rule 415(a)(4) under the Act (such transactions are hereinafter referred to as "**At the Market Offerings**") and (B) such other sales of the Shares on behalf of the Company in its capacity as agent of the Company as shall be agreed by the Company and the Agent in writing.

(d) If Shares are to be sold in an Agency Transaction in an At the Market Offering, the Agent will confirm in writing to the Company the number of Shares sold on any Exchange Business Day and the related Gross Sales Price and Net Sales Price (as each of such terms is defined in Section 2(b) below) no later than the opening of trading on the immediately following Exchange Business Day.

(e) If the Company shall default on its obligation to deliver Shares to the Agent pursuant to the terms of any Agency Transaction or Terms Agreement, the Company shall (i) indemnify and hold harmless the Agent and its successors and assigns from and against any and all losses, claims, damages, liabilities and reasonable and documented expenses arising from or as a result of such default by the Company and (ii) notwithstanding any such default, pay to the Agent the commission to which it would otherwise be entitled in connection with such sale in accordance with Section 2(b) below.

(f) The Company acknowledges and agrees that (i) there can be no assurance that the Agent will be successful in selling the Shares, (ii) the Agent shall incur no liability or obligation to the Company or any other person or entity if it does not sell Shares for any reason other than a failure by the Agent to use its commercially reasonable efforts consistent with its normal trading and sales practices and applicable law and regulations to sell such Shares in accordance with the terms of this Agreement, and (iii) the Agent shall be under no obligation to purchase Shares on a principal basis pursuant to this Agreement, except as may otherwise be specifically agreed by the Agent and the Company in a Terms Agreement.

2. Transaction Acceptances and Terms Agreements.

(a) The Company may, from time to time during the Term, propose to the Agent that they enter into an Agency Transaction to be executed on a specified Exchange Business Day or over a specified period of Exchange Business Days, which proposal shall be made to the Agent by telephone or by email from any of the individuals listed as an authorized representative of the Company on Schedule A hereto to make such sales and shall set forth the information specified below (each, a “**Transaction Proposal**”). If the Agent agrees to the terms of such proposed Agency Transaction or if the Company and the Agent mutually agree to modified terms for such proposed Agency Transaction, then the Agent shall promptly deliver to the Company by email a notice (each, a “**Transaction Acceptance**”) confirming the terms of such proposed Agency Transaction as set forth in such Transaction Proposal or setting forth the modified terms for such proposed Agency Transaction as agreed by the Company and the Agent, as the case may be, whereupon such Agency Transaction shall become a binding agreement between the Company and the Agent. Each Transaction Proposal shall specify:

- (i) the Exchange Business Day(s) on which the Shares subject to such Agency Transaction are intended to be sold (each, a “**Purchase Date**”);
- (ii) the maximum number of Shares to be sold by the Agent (the “**Specified Number of Shares**”) on, or over the course of, such Purchase Date(s), or as otherwise agreed between the Company and Agent and documented in the relevant Transaction Acceptance; and;
- (iii) the lowest price per Share, if any, at which the Company is willing to sell Shares on each such Purchase Date or a formula pursuant to which such lowest price shall be determined (each, a “**Floor Price**”); and
- (iv) if other than 3.0% of the Gross Sales Price, the Agent’s discount or commission.

A Transaction Proposal shall not set forth a Specified Number of Shares and Floor Price the product of which, when added to the aggregate Gross Sales Price of Shares previously purchased and to be purchased pursuant to pending Transaction Acceptances (if any) hereunder and any Terms Agreements, results or could result in a total Gross Sales Price that exceeds the Maximum Amount nor shall it set forth a Floor Price which is lower than the minimum price authorized from time to time by the Company’s board of directors or, if permitted by applicable law and the Company’s charter and by-laws, a duly authorized committee thereof. The Company shall have responsibility for maintaining records with respect to the aggregate number and aggregate Gross Sales Price of Shares sold and for otherwise monitoring the availability of Shares for sale under the Registration Statement and for ensuring that the aggregate number and aggregate Gross Sales Price of Shares offered and sold does not exceed, and the price at which any Shares are offered or sold is not lower than, the aggregate number and aggregate Gross Sales Price of Shares and the minimum price authorized from time to time by the Company’s board of directors or, if permitted by applicable law and the Company’s charter and by-laws, a duly authorized committee thereof. In the event that more than one Transaction Acceptance with respect to any Purchase Date(s) is delivered by the Agent to the Company, the latest Transaction Acceptance shall govern any sales of Shares for the relevant Purchase Date(s), except to the extent of any action occurring pursuant to a prior Transaction Acceptance and prior to the delivery to the Company of the latest Transaction Acceptance. The Company or the Agent may, upon notice to the other such party by either email (with receipt confirmed by telephone or appropriate, non-automated email) or telephone (confirmed promptly by e-mail), suspend or terminate the offering of the Shares pursuant to Agency Transactions for any reason; *provided, however*, that such suspension or termination shall not affect or impair the parties’ respective obligations with respect to the Shares sold hereunder prior to the giving of such notice or their respective obligations under any Terms Agreement. Notwithstanding the foregoing, if the terms of any Agency Transaction contemplate that Shares shall be sold on more than one Purchase Date, then the Company and the Agent shall mutually agree to such additional terms and conditions as they deem reasonably necessary in respect of such multiple Purchase Dates, and such additional terms and conditions shall be set forth in or confirmed by, as the case may be, the relevant Transaction Acceptance and be binding to the same extent as any other terms contained therein.

(b) The Purchase Date(s) in respect of the Shares deliverable pursuant to any Transaction Acceptance shall be set forth in or confirmed by, as the case may be, the applicable Transaction Acceptance. Except as otherwise agreed to between the Company and the Agent, the Agent's commission for any Shares sold through the Agent pursuant to this Agreement shall be a percentage, not to exceed 3.0%, of the actual sales price of such Shares (the "**Gross Sales Price**"), which commission shall be as set forth in or confirmed by, as the case may be, the applicable Transaction Acceptance; *provided, however*, that such commission shall not apply when the Agent acts as principal, in which case such commission or a discount shall be set forth in the applicable Terms Agreement. Notwithstanding the foregoing, in the event the Company engages the Agent for a sale of Shares in an Agency Transaction that would constitute a "distribution," within the meaning of Rule 100 of Regulation M under the Exchange Act or a "block" within the meaning of Rule 10b-18(a)(5) under the Exchange Act, the Company will provide the Agent, at the Agent's request and upon reasonable advance notice to the Company, on or prior to the Settlement Date the opinions of counsel, accountants' letters and officers' certificates pursuant to Section 5 hereof, each dated the Settlement Date, and such other documents and information as the Agent shall reasonably request, and the Company and the Agent will agree to compensation that is customary for the Agent with respect to such transaction. The Gross Sales Price less the Agent's commission and after deduction for any transaction fees, transfer taxes or similar taxes or fees imposed by any governmental, regulatory or self-regulatory organization in respect of the sale of the applicable Shares is referred to herein at the "**Net Sales Price**."

(c) Payment of the Net Sales Price for Shares sold by the Company on any Purchase Date pursuant to a Transaction Acceptance shall be made to the Company by wire transfer of immediately available funds to the account of the Company (which the Company shall provide to the Agent at least one Exchange Business Day prior to the applicable Agency Settlement Date (as defined below)) against delivery of such Shares to the Agent's account, or an account of the Agent's designee, at The Depository Trust Company through its Deposit and Withdrawal at Custodian System ("**DWAC**") or by such other means of delivery as may be agreed to by the Company and the Agent. Such payment and delivery shall be made at or about 10:00 a.m. (New York City time) on the second Exchange Business Day (or such other day as may, from time to time, become standard industry practice for settlement of such a securities issuance or as agreed to by the Company and the Agent) following each Purchase Date (each, an "**Agency Settlement Date**").

(d) If, as set forth in or confirmed by, as the case may be, the related Transaction Acceptance, a Floor Price has been agreed to by the parties with respect to a Purchase Date, and the Agent thereafter determines and notifies the Company that the Gross Sales Price for such Agency Transaction would not be at least equal to such Floor Price, then the Company shall not be obligated to issue and sell through the Agent, and the Agent shall not be obligated to place, the Shares proposed to be sold pursuant to such Agency Transaction on such Purchase Date, unless the Company and the Agent otherwise agree in writing.

(e) If either party has reason to believe that the exemptive provisions set forth in Rule 101(c)(1) of Regulation M under the Exchange Act are not satisfied with respect to the Shares, it shall promptly notify the other party and sales of the Shares under this Agreement, any Transaction Acceptance or any Terms Agreement shall be suspended until that or other exemptive provisions have been satisfied in the judgment of each party. On or prior to the delivery of a prospectus that is required (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with the offering or sale of the Shares, the Company shall calculate the average daily trading volume (as defined under “**ADTV**” by Rule 100 of Regulation M under the Exchange Act) of the Common Stock based on market data provided by Bloomberg L.P. or such other sources as agreed upon by the Company and the Agent.

(f) (i) If the Company wishes to issue and sell the Shares pursuant to this Agreement but other than as set forth in Section 2(a) of this Agreement, it will notify the Agent of the proposed terms of the Principal Transaction. If the Agent, acting as principal, wishes to accept such proposed terms (which it may decline to do for any reason in its sole discretion) or, following discussions with the Company, wishes to accept amended terms, the Company and the Agent shall enter into a Terms Agreement setting forth the terms of such Principal Transaction.

(ii) The terms set forth in a Terms Agreement shall not be binding on the Company or the Agent unless and until the Company and the Agent have each executed and delivered such Terms Agreement accepting all of the terms of such Terms Agreement. In the event of a conflict between the terms of this Agreement and the terms of a Terms Agreement, the terms of such Terms Agreement shall control.

(g) Each sale of the Shares to the Agent in a Principal Transaction shall be made in accordance with the terms of this Agreement and a Terms Agreement, which shall provide for the sale of such Shares to, and the purchase thereof by, the Agent. A Terms Agreement may also specify certain provisions relating to the reoffering of such Shares by the Agent. The commitment of the Agent to purchase the Shares pursuant to any Terms Agreement shall be deemed to have been made on the basis of the representations, warranties and agreements of the Company contained, and shall be subject to the terms and conditions set forth, in this Agreement and such Terms Agreement. Any such Terms Agreement shall specify the number of the Shares to be purchased by the Agent pursuant thereto, the price to be paid to the Company for such Shares, any provisions relating to rights of, and default by, underwriters, if any, acting together with the Agent in the reoffering of the Shares, and the time and date (each such time and date being referred to herein as a “**Principal Settlement Date**”; and, together with any Agency Settlement Date, a “**Settlement Date**”) and place of delivery of and payment for such Shares.



(h) Notwithstanding any other provision of this Agreement, the Company shall not offer, sell or deliver, or request the offer or sale, of any Shares pursuant to this Agreement (whether in an Agency Transaction or a Principal Transaction) and, by notice to the Agent given by either email (with receipt confirmed by telephone or appropriate, non-automated email) or telephone (confirmed promptly by email), shall cancel any instructions for the offer or sale of any Shares, and the Agent shall not be obligated to offer or sell any Shares, (i) during any period in which the Company's insider trading policy, as it exists on the date of this Agreement, would prohibit the purchases or sales of the Company's Common Stock by any of its officers or directors, (ii) during any period in which the Company is, or could be deemed to be, in possession of material non-public information or (iii) at any time from and including the date on which the Company shall issue a press release containing, or shall otherwise publicly announce, its earnings, revenues or other results of operations (an "**Earnings Announcement**") through and including the time that is 24 hours after the time that the Company files a Quarterly Report on Form 10-Q or an Annual Report on Form 10-K that includes consolidated financial statements as of and for the same period or periods, as the case may be, covered by such Earnings Announcement.

(i) The Company agrees that any offer to sell, any solicitation of an offer to buy, or any sales of Shares by the Company shall be effected only by or through the Agent on any Exchange Business Day.

(j) Anything in this Agreement to the contrary notwithstanding, the Company shall not authorize the issuance and sale of, and the Agent, as sales agent, shall not be obligated to use its commercially reasonable efforts, consistent with its normal trading and sales practices, to sell, any Shares at a price lower than the minimum price, or in a number or with an aggregate gross or net sales price in excess of the number or aggregate gross or net sales price, as the case may be, authorized from time to time to be issued and sold under this Agreement and any Terms Agreement, in each case by the Company's board of directors or, if permitted by applicable law and the Company's charter and by-laws, a duly authorized committee thereof, or in a number in excess of the number of Shares approved for listing on the Exchange, or in excess of the number or amount of Shares available for issuance on the Registration Statement or as to which the Company has paid the applicable registration fee, it being understood and agreed by the parties hereto that compliance with any such limitations shall be the sole responsibility of the Company.

3. Representations, Warranties and Agreements of the Company. The Company represents and warrants to, and agrees with, the Agent, on and as of (i) the date hereof, (ii) each date on which the Company receives a Transaction Acceptance (the “**Time of Acceptance**”), (iii) each date on which the Company executes and delivers a Terms Agreement, (iv) each Time of Sale (as defined in Section 3(a)), (v) each Settlement Date and (vi) each Bring-Down Delivery Date (as defined in Section 6(b)) (each such date listed in (i) through (vi), a “**Representation Date**”), as follows:

(a) The Registration Statement is an “automatic shelf registration statement” as defined under Rule 405 of the Act, or, alternatively has been amended to a shelf registration statement under Rule 415 of the Act as needed, that has been filed with the Commission not earlier than three years prior to the date hereof; there is no order preventing or suspending the use of the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus, and, to the knowledge of the Company, no proceeding for that purpose or pursuant to Section 8A of the Act against the Company or related to the offering has been initiated or, to the knowledge of the Company, threatened by the Commission; no notice of objection of the Commission to the use of such Registration Statement pursuant to Rule 401(g)(2) under the Act has been received by the Company; the Registration Statement complied when it initially became effective, complies as of the date hereof and, as then amended or supplemented, as of each other Representation Date will comply, in all material respects, with the requirements of the Act; the conditions to the use of Form S-3 in connection with the offering and sale of the Shares as contemplated hereby have been satisfied; the Registration Statement meets, and the offering and sale of the Shares as contemplated hereby comply with, the requirements of Rule 415 under the Act (including, without limitation, Rule 415(a)(5)); the Prospectus complied or will comply, at the time it was or will be filed with the Commission, and will comply, as then amended or supplemented, as of each Representation Date, in all material respects, with the requirements of the Act; the Registration Statement did not, as of the time of its initial effectiveness, and does not or will not, as then amended or supplemented, as of each Representation Date, contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading; as of each Representation Date, the Prospectus, as then amended or supplemented, together with all of the then issued Permitted Free Writing Prospectuses, if any, will not contain an untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; *provided, however*, that the Company makes no representation or warranty with respect to any statement in or omission from the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus made in reliance upon and in conformity with information concerning the Agent and furnished in writing by or on behalf of the Agent expressly for use in the Registration Statement, the Prospectus or such Permitted Free Writing Prospectus (it being understood that such information consists solely of the information specified in Section 9(b)). As used herein, “**Time of Sale**” means (i) with respect to each offering of Shares pursuant to this Agreement, the time of the Agent’s initial entry into contracts with investors for the sale of such Shares and (ii) with respect to each offering of Shares pursuant to any relevant Terms Agreement, the time of sale of such Shares.

(b) Prior to the execution of this Agreement, the Company has not, directly or indirectly, offered or sold any of the Shares by means of any “prospectus” (within the meaning of the Act) or used any “prospectus” (within the meaning of the Act) in connection with the offer or sale of the Shares, in each case other than the Basic Prospectus. The Company represents and agrees that, unless it obtains the prior consent of the Agent, until the termination of this Agreement, it has not made and will not make any offer relating to the Shares that would constitute an “issuer free writing prospectus” (as defined in Rule 433 under the Act) or that would otherwise constitute a “free writing prospectus” (as defined in Rule 405 under the Act) other than any Permitted Free Writing Prospectus. Any such free writing prospectus relating to the Shares consented to by the Agent (including any Free Writing Prospectus prepared by the Company solely for use in connection with the offering contemplated by a particular Terms Agreement) is hereinafter referred to as a “**Permitted Free Writing Prospectus**”. The Company has complied and will comply in all material respects with the requirements of Rule 433 under the Act applicable to any Permitted Free Writing Prospectus, including timely filing with the Commission where required, legending and record keeping. The conditions set forth in one or more of subclauses (i) through (iv), inclusive, of Rule 433(b)(1) under the Act are satisfied, and the registration statement relating to the offering of the Shares contemplated hereby, as initially filed with the Commission, includes a prospectus that, other than by reason of Rule 433 under the Act, satisfies the requirements of Section 10 of the Act; the Company is not disqualified, by reason of Rule 164(f) or (g) under the Act, from using, in connection with the offer and sale of the Shares, “free writing prospectuses” (as defined in Rule 405 under the Act) pursuant to Rules 164 and 433 under the Act; the Company was not as of each eligibility determination date for purposes of Rules 164 and 433 under the Act with respect to the offering of the Shares contemplated by the Registration Statement and this Agreement and is not an “ineligible issuer” and was as of each such eligibility date and is a “well-known seasoned issuer” (each as defined in Rule 405 under the Act). At the time of filing the Registration Statement, at the time of the most recent amendment thereto for the purposes of complying with Section 10(a)(3) of the Securities Act (whether such amendment was by post-effective amendment or incorporated report filed pursuant to Section 13 or 15(d) of the Exchange Act or in the form of a prospectus), at the earliest time thereafter that the Company or any offering participant made a bona fide offer (within the meaning of Rule 164(h)(2) under the Securities Act) of the Shares, at the time the Company or any person acting on its behalf (within the meaning, for this clause only, of Rule 163(c) under the Securities Act) made any offer relating to the Shares in reliance on the exemption of Rule 163 under the Securities Act, at the time of original effectiveness, and at the date hereof, the Company is and was a “well-known seasoned issuer.” The Company has paid or, no later than the business day after the date of this Agreement, will pay the registration fee for the offering of the Maximum Amount of Shares pursuant to Rules 456 and 457 under the Act.

(c) The Incorporated Documents, when they were filed with the Commission (or, if any amendment with respect to any such document was filed, when such amendment was filed), conformed in all material respects to the requirements of the Act or the Exchange Act, as applicable, and none of such documents contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; and any further documents so filed during the Term and incorporated by reference in the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus, when such documents become effective or are filed with the Commission, as the case may be, will conform in all material respects to the requirements of the Act or the Exchange Act, as applicable, and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(d) The financial statements of the Company and its consolidated subsidiaries and the related notes thereto included or incorporated by reference in the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus comply in all material respects with the applicable requirements of the Act and the Exchange Act, as applicable, and present fairly in all material respects the consolidated financial position of the Company and its subsidiaries as of the dates indicated and the results of their operations and the changes in their cash flows for the periods specified; the financial statements of any other business or entity and its consolidated subsidiaries (if any) and the related notes thereto included or incorporated by reference in the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus comply in all material respects with the applicable requirements of the Act or the Exchange Act, as applicable, and present fairly in all material respects the consolidated (if applicable) financial position of such entity or business, as the case may be, and its subsidiaries (if any) as of the dates indicated and the results of its or their, as the case may be, operations and the changes in its or their, as the case may be, cash flows for the periods specified; and all such financial statements have been prepared in conformity with generally accepted accounting principles in the United States (“GAAP”) applied on a consistent basis throughout the periods covered thereby, except in the case of any unaudited, interim financial statements, which are subject to normal year-end adjustments and do not contain certain footnotes as permitted by the applicable rules of the Commission, and all supporting schedules to such financial statements included or incorporated by reference in the Registration Statement fairly present in all material respects the information required to be stated therein. Any pro forma financial statements and related notes included or incorporated by reference in the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus comply in all material respects with the applicable requirements of the Act and the Exchange Act, as applicable, present fairly in all material respects the information shown therein, have been prepared in accordance with the Commission’s rules and guidelines with respect to pro forma financial statements and have been properly compiled on the bases described therein, and the assumptions used in the preparation thereof are reasonable and the adjustments used therein are appropriate to give effect to the transactions and circumstances referred to therein.

(e) Since the respective dates as of which information is given in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, except as otherwise stated therein, (i) there has not been any material change in the capital stock (other than the issuance of shares of Common Stock upon exercise of stock options issued under, and the grant of options and awards under, equity incentive plans described in the Registration Statement and the Prospectus, the issuance of Shares pursuant to this Agreement) or short-term debt or long-term debt (except for borrowings and the repayment of borrowings in the ordinary course of business) of the Company or any of its subsidiaries, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock (other than regularly scheduled cash dividends in amounts that are consistent with past practice), or any material adverse change, or any development that would reasonably be expected to result in a material adverse change, in or affecting the business, properties, management, financial position, stockholders’ equity, results of operations or prospects of the Company and its subsidiaries taken as a whole; (ii) neither the Company nor any of its subsidiaries has entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company and its subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and its subsidiaries taken as a whole; and (iii) neither the Company nor any of its subsidiaries has sustained any loss or interference with its business that is material to the Company and its subsidiaries taken as a whole and that is either from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority, except in each case as otherwise disclosed in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus.

(f) The Company and each of its subsidiaries have been duly organized and are validly existing and in good standing under the laws of their respective jurisdictions of organization, are duly qualified to do business and are in good standing in each jurisdiction in which their respective ownership or lease of property or the conduct of their respective businesses requires such qualification, and have all power and authority necessary to own or hold their respective properties and to conduct the businesses in which they are engaged, except where the failure to be so qualified or in good standing or have such power or authority would not, individually or in the aggregate, have a material adverse effect on the business, properties, management, financial position, stockholders' equity, results of operations or prospects of the Company and its subsidiaries taken as a whole or on the performance by the Company of its obligations under this Agreement or any Terms Agreement (a "**Material Adverse Effect**"). The Company does not own or control, directly or indirectly, any corporation, association or other entity other than the subsidiaries listed in Exhibit 21 to the Company's most recent Annual Report on Form 10-K incorporated by reference in the Registration Statement. Since inception Akero Securities Corporation, a wholly owned subsidiary of the Company, has not conducted, and does not currently conduct, any operations, has not had and does not have any employees and has been and is engaged exclusively in buying, selling, dealing in and holding publicly-traded securities on its own behalf and not as a broker.

(g) The Company has an authorized capitalization as set forth in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus; all the outstanding shares of capital stock of the Company have been duly and validly authorized and issued and are fully paid and non-assessable and are not subject to any preemptive or similar rights; except as described in or expressly contemplated by the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, there are no outstanding rights (including, without limitation, pre-emptive rights), warrants or options to acquire, or instruments convertible into or exchangeable for, any shares of capital stock or other equity interests of the Company or any of its subsidiaries, or any contract, commitment, agreement, understanding or arrangement of any kind relating to the issuance of any capital stock in the Company or any such subsidiary, any such convertible or exchangeable securities or any such rights, warrants or options; and the capital stock of the Company and the Company's charter and by-laws conform in all material respects to the descriptions thereof contained in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus; and all the outstanding shares of capital stock or other equity interests of each subsidiary owned, directly or indirectly, by the Company have been duly and validly authorized and issued, are fully paid and non-assessable and are (except, in the case of any foreign subsidiary, for directors' qualifying shares), owned directly or indirectly by the Company, free and clear of any lien, charge, encumbrance, security interest, restriction on voting or transfer or any other claim of any third party.

(h) With respect to the stock options (the “**Stock Options**”) granted pursuant to the stock-based compensation plans of the Company and its subsidiaries (the “**Company Stock Plans**”), (i) each Stock Option intended to qualify as an “incentive stock option” under Section 422 of the Internal Revenue Code of 1986, as amended (the “**Code**”), so qualified on the date of grant, (ii) each grant of a Stock Option was duly authorized no later than the date on which the grant of such Stock Option was by its terms to be effective (the “**Grant Date**”) by all necessary corporate action, including, as applicable, approval by the board of directors of the Company (or a duly constituted and authorized committee thereof) and any required stockholder approval by the necessary number of votes or written consents, and the award agreement governing such grant (if any) was duly executed and delivered by each party thereto, (iii) each such grant was made in all material respects in accordance with the terms of the Company Stock Plans and the Exchange Act, and (iv) each such grant was properly accounted for in accordance with GAAP in the financial statements (including the related notes) of the Company and disclosed in the Company’s filings with the Commission in accordance with the Exchange Act and all other applicable laws. The Company has not knowingly granted, and there is no and has been no policy or practice of the Company of granting, Stock Options prior to, or otherwise coordinating the grant of Stock Options with, the release or other public announcement of material information regarding the Company or its subsidiaries or their results of operations or prospects.

(i) This Agreement has been duly authorized, executed and delivered by the Company and any Terms Agreement will have been duly authorized, executed and delivered by the Company.

(j) The Shares to be issued and sold by the Company hereunder or under any Terms Agreement have been duly authorized by the Company and, when issued and delivered and paid for as provided herein or in any Terms Agreement, as the case may be, will be duly and validly issued, will be fully paid and nonassessable and will conform in all material respects to the description thereof in the Registration Statement, the Prospectus, and any Permitted Free Writing Prospectus; and the issuance and sale of the Shares are not and will not be subject to any preemptive or similar rights that have not been duly and validly waived or satisfied.

(k) The Company has or will have full right, power and authority to execute and deliver this Agreement and any Terms Agreement and perform its obligations hereunder or thereunder, including the Company’s issuance, sale and delivery of the Shares as provided herein and therein; and all action required to be taken for the due and proper authorization, execution and delivery by each of the Company of this Agreement and any Terms Agreement and the consummation by it of the transactions contemplated hereby and thereby has been duly and validly taken (or, in the case of any Terms Agreement, such action will have been duly and validly authorized).

(l) This Agreement conforms and each Terms Agreement will conform in all material respects to the description thereof contained in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus.

(m) Neither the Company nor any of its subsidiaries is (i) in violation of its charter or by-laws or similar organizational documents; (ii) in default, and no event has occurred that, with notice or lapse of time or both, would constitute such a default, in the due performance or observance of any term, covenant or condition contained in any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property or assets of the Company or any of its subsidiaries is subject; or (iii) in violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (ii) and (iii) above, for any such default or violation that would not, individually or in the aggregate, have a Material Adverse Effect.

(n) The execution, delivery and performance by the Company of this Agreement and any Terms Agreement, the issuance and sale of the Shares, the compliance by the Company with the terms hereof and of any Terms Agreement and the consummation of the transactions contemplated hereby or by any Terms Agreement will not (i) conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default under, result in the termination, modification or acceleration of, or result in the creation or imposition of any lien, charge or encumbrance upon any property, right or assets of the Company or any of its subsidiaries pursuant to, any indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which the Company or any of its subsidiaries is bound or to which any of the property, right or assets of the Company or any of its subsidiaries is subject, (ii) result in any violation of the provisions of the charter or by-laws or other similar organizational documents of the Company or any of its subsidiaries or (iii) result in the violation of any law or statute or any judgment, order, rule or regulation of any court or arbitrator or governmental or regulatory authority, except, in the case of clauses (i) and (iii) above, for any such conflict, breach, violation, default, lien, charge or encumbrance that would not, individually or in the aggregate, have a Material Adverse Effect.

(o) No consent, filing, approval, authorization, order, license, registration or qualification of or with any court or arbitrator or governmental or regulatory authority is required for the execution, delivery and performance by the Company of this Agreement or any Terms Agreement, the issuance and sale of the Shares, compliance by the Company with the terms of this Agreement or of any Terms Agreement and the consummation of the transactions contemplated by this Agreement or any Terms Agreement, except as have been made or obtained, except as may be required by and made in accordance with or obtained under state securities laws or regulations, and except for such filings of Permitted Free Writing Prospectuses and any amendments or supplements to the Registration Statement or the Prospectus or any documents incorporated or deemed to be incorporated by reference therein as may be required by the Act or the Exchange Act from time to time, and except for such filings as the Exchange may require from time to time.

(p) Except as described in the Registration Statement and the Prospectus, there are no legal, governmental or regulatory investigations, actions, demands, claims, suits, arbitrations, inquiries or proceedings (“**Actions**”) pending to which the Company or any of its subsidiaries is or may be a party or to which any property of the Company or any of its subsidiaries is or may be the subject that, individually or in the aggregate, if determined adversely to the Company or any of its subsidiaries, would reasonably be expected to have a Material Adverse Effect; no such Actions are threatened or, to the knowledge of the Company, contemplated by any governmental or regulatory authority or threatened by others; and (i) there are no current or pending Actions, that are required under the Act or the Exchange Act to be described in the Registration Statement or the Prospectus or any document incorporated by reference therein that are not so described as required and (ii) there are no statutes, regulations or contracts or other documents that are required under the Act or the Exchange Act to be filed as exhibits to the Registration Statement described in the Registration Statement or the Prospectus or any document incorporated by reference therein that are not so filed as exhibits or so described as required.

(q) Deloitte & Touche LLP, who has certified certain financial statements of the Company and its consolidated subsidiaries is included or incorporated by reference in the Registration Statement and the Prospectus, is an independent registered public accounting firm with respect to the Company and its subsidiaries within the applicable rules and regulations adopted by the Commission and the Public Company Accounting Oversight Board (“PCAOB”) and as required by the Act. Each other independent registered public accounting firm, if any, that has certified or reported on any other financial statements included or incorporated by reference in the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus is an independent registered public accounting firm with respect to the Company and its subsidiaries or other appropriate entity, as applicable, within the applicable rules and regulations adopted by the Commission and the PCAOB and as required by the Act.

(r) (i) The Company and its subsidiaries have good and marketable title in fee simple (in the case of real property) to, or have valid and marketable rights to lease or otherwise use, all items of real and personal property and assets that are material to the respective businesses of the Company and its subsidiaries, in each case free and clear of all liens, encumbrances, claims and defects and imperfections of title except those that (i) do not materially interfere with the use made and proposed to be made of such property by the Company and its subsidiaries or (ii) would not reasonably be expected, individually or in the aggregate, to have a Material Adverse Effect.

(s) The Company and its subsidiaries own, or possess valid and enforceable licensed rights to use, all material patents, patent applications, trademarks, service marks, trade names, trademark registrations, service mark registrations, trade dress, designs, data, database rights, Internet domain names, copyrights, works of authorship, licenses, proprietary information and know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures) necessary for the conduct of their respective businesses as currently conducted and as proposed to be conducted (collectively, “Intellectual Property”), and, to the Company’s knowledge, the conduct of their respective businesses does not and will not infringe, misappropriate or otherwise conflict in any material respect with any such rights of others. The Intellectual Property of the Company has not been adjudged by a court of competent jurisdiction to be invalid or unenforceable, in whole or in part, and the Company is unaware of any facts which would form a reasonable basis for any such adjudication. The Company and its subsidiaries have not received any notice of any claim of infringement, misappropriation with any intellectual property rights of another, and the Company is unaware of any facts which would form a reasonable basis for any such notice or claim. To the Company’s knowledge: (i) there are no third parties who have rights to any Intellectual Property, except for customary reversionary rights of third-party licensors with respect to Intellectual Property that is disclosed in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus (“Disclosure Documents”) as owned by or licensed to the Company or its subsidiaries; and (ii) there is no infringement by third parties of any Intellectual Property. Except as disclosed in the the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, there is no pending or, to the Company’s knowledge, threatened action, suit, proceeding or claim by others: (A) challenging the Company’s rights in or to any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; (B) challenging the validity, enforceability or scope of any Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim; or (C) asserting that the Company or its subsidiaries infringe, misappropriate, or otherwise violate, or would, upon the commercialization of any product or service described in the Disclosure Documents as under development, infringe, misappropriate, or otherwise violate, any intellectual property rights of others, and the Company is unaware of any facts which would form a reasonable basis for any such action, suit, proceeding or claim. The Company and its subsidiaries have complied with the terms of each agreement pursuant to which Intellectual Property has been licensed to the Company or its subsidiaries, and all such agreements are in full force and effect. To the Company’s knowledge, there are no material defects in any of the patents or patent applications included in the Intellectual Property. The Company and its subsidiaries have taken all reasonable steps to protect, maintain and safeguard their Intellectual Property, including the execution of appropriate nondisclosure, confidentiality agreements and invention assignment agreements and invention assignments with their employees, and to the Company’s knowledge, no employee of the Company is in or has been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement, or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee’s employment with the Company. To the Company’s knowledge, the duty of candor and good faith as required by the United States Patent and Trademark Office during the prosecution of the United States patents and patent applications included in the Intellectual Property have been complied with; and in all foreign offices having similar requirements, all such requirements have been complied with. None of the Company owned Intellectual Property or technology (including information technology and outsourced arrangements) employed by the Company or its subsidiaries has been obtained or is being used by the Company or its subsidiary in violation of any contractual obligation binding on the Company or its subsidiaries or any of their respective officers, directors or employees or otherwise in violation of the rights of any persons.



(t) The Company and its subsidiaries have taken reasonable and customary actions to protect their rights in and prevent the unauthorized use and disclosure of material trade secrets and confidential business information (including material confidential source code, ideas, research and development information, know-how, formulas, compositions, technical data, designs, drawings, specifications, research records, records of inventions, test information, financial, marketing and business data, customer and supplier lists and information, pricing and cost information, business and marketing plans and proposals) owned by the Company and its subsidiaries, and, to the knowledge of the Company, there has been no unauthorized use or disclosure.

(u) Except as could not reasonably be expected to have a Material Adverse Effect (i) the computers, software, servers, networks, data communications lines, and other information technology systems owned, licensed, leased or otherwise used by the Company or its subsidiaries (excluding any public networks) (collectively, the “IT Assets”) operate and perform as is necessary for the operation of the business of the Company and its subsidiaries as currently conducted and as proposed to be conducted as described in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, and (ii) such IT Assets are not infected by viruses, disabling code or other harmful code. The Company and its subsidiaries have at all times implemented and maintained all reasonably necessary controls, policies, procedures, and safeguards to maintain and protect their confidential information and the integrity, continuous operation, redundancy and security of all IT Assets and data (including all Personal Data (defined below) sensitive, confidential or regulated data (“Confidential Data”) used in connection with their businesses, and there have been no breaches, violations, outages or unauthorized uses of or accesses to same, except for those that have been remedied without material cost or liability or the duty to notify any other person, nor any incidents under internal review or investigations relating to the same.

(v) The Company and its subsidiaries are, and at all prior times were, in compliance in all material respects with all applicable state, federal, and international data privacy and data security laws and regulations, including without limitation HIPAA and the HITECH Act, and the European Union General Data Protection Regulation (“**GDPR**”) (EU 2016/679), and the Company and its subsidiaries are currently or have taken commercially reasonable actions to prepare to comply with the California Consumer Protection Act of 2018 (“**CCPA**”) (collectively, the “**Privacy Laws**”). To address compliance with the Privacy Laws, the Company and its subsidiaries have in place, comply with, and take commercially reasonable steps designed to achieve compliance in all material respects with their policies and procedures relating to data privacy and security and the collection, storage, use, disclosure, handling, and transfer of Personal Data (the “**Policies**”). “**Personal Data**” means (i) a natural person’s name, street address, telephone number, e-mail address, photograph, social security number or tax identification number, driver’s license number, passport number, credit card number, bank information, or customer or account number; (ii) any information which would qualify as “personally identifying information” under the Federal Trade Commission Act, as amended; (iii) Protected Health Information as defined by the Health Insurance Portability and Accountability Act of 1996 (“**HIPAA**”); (iv) “personal data” as defined by GDPR; and (v) any other piece of information that identifies such natural person. At all times, the Company and its subsidiaries have made all disclosures to users or customers required by applicable Privacy Laws and regulatory rules or requirements, and none of such disclosures made or contained in any Policy have, to the knowledge of the Company, been inaccurate or in violation of any applicable laws and regulatory rules or requirements in any material respect. The Company further certifies that (a) neither it nor any subsidiary at any time: (i) has received receive written notice of any actual or potential liability, including, but not limited to security or data privacy breaches or other unauthorized or improper access to, use of, or destruction of its Personal Data owned or controlled by the Company or its subsidiaries, under or relating to, or actual or potential violation of, any of the Privacy Laws, and has no knowledge of any event or condition that would reasonably be expected to result in any such notice; (ii) other than pursuant to its ongoing compliance efforts in the ordinary course of business, is currently conducting, subject to, or paying, in whole or in part, any material investigation, remediation, or other corrective action resulting from the Company’s or its subsidiaries’ non-compliance with any Privacy Law; or (iii) is a party to any order, decree, settlement agreement, or judgment from a governmental entity that imposes any obligation or liability under any Privacy Law; and (b) it is not aware of any specific events rendering any of the foregoing reasonably likely to occur.

(w) There is no complaint to or audit, proceeding, investigation (formal or informal) or claim currently pending against the Company or its subsidiaries, or to the knowledge of the Company, any of its customers (specific to the customer’s use of the products or services of the Company) by any state Attorney General or related office, the Federal Trade Commission, the U.S. Department of Health and Human Services and any office contained therein (“**HHS**”), or any similar authority in any jurisdiction other than the United States or any other governmental entity, or by any person in respect of the collection, use or disclosure of Personal Data by the Company or its subsidiaries, and, to the knowledge of the Company, no such complaint, audit, proceeding, investigation or claim is threatened.

(x) The Company: (A) is and at all times has been in material compliance with all statutes, rules or regulations of the FDA and other comparable governmental entities applicable to the ownership, testing, development, manufacture, packaging, processing, use, distribution, marketing, labeling, promotion, sale, offer for sale, storage, import, export or disposal of any product under development, manufactured or distributed by the Company (“**Applicable Laws**”); (B) has not received any FDA Form 483, notice of adverse finding, warning letter, untitled letter or other correspondence or notice from the FDA or any governmental entity alleging or asserting material noncompliance with any Applicable Laws or any licenses, certificates, approvals, clearances, exemptions, authorizations, permits and supplements or amendments thereto required by any such Applicable Laws (“**Authorizations**”); (C) possesses all material Authorizations and such Authorizations are valid and in full force and effect and the Company is not in material violation of any term of any such Authorizations; (D) has not received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from the FDA or any governmental entity or third party alleging that any product operation or activity is in material violation of any Applicable Laws or Authorizations and has no knowledge that the FDA or any governmental entity or third party is considering any such claim, litigation, arbitration, action, suit, investigation or proceeding; (E) has not received written notice that the FDA or any governmental entity has taken, is taking or intends to take action to limit, suspend, modify or revoke any material Authorizations and has no knowledge that the FDA or any governmental entity is considering such action; and (F) has filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Applicable Laws or Authorizations and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission).

(y) The studies, tests and preclinical and clinical trials conducted by or on behalf of the Company, to the Company’s knowledge, were and, if still ongoing, are being conducted in all material respects in accordance with experimental protocols, procedures and controls pursuant to accepted professional scientific standards and all Authorizations and Applicable Laws, including, without limitation, the Federal Food, Drug and Cosmetic Act and the rules and regulations promulgated thereunder and current Good Clinical Practices and Good Laboratory Practices and any applicable rules, regulations and policies of the jurisdiction in which such trials and studies are being conducted; the descriptions of the results of such studies, tests and trials contained in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus are, to the Company’s knowledge, accurate and complete in all material respects and fairly present the data derived from such studies, tests and trials; except to the extent disclosed in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, the Company is not aware of any studies, tests or trials, the results of which the Company believes reasonably call into question the study, test, or trial results described or referred to in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, when viewed in the context in which such results are described and the clinical state of development; and, except to the extent disclosed in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, the Company has not received any notices or correspondence from the FDA or any governmental entity requiring the termination or suspension of any studies, tests or preclinical or clinical trials conducted by or on behalf of the Company, other than ordinary course communications with respect to modifications in connection with the design and implementation of such trials, copies of which communications have been made available to you.

(z) The Company and its subsidiaries, and to the Company's knowledge their respective officers, directors, employees and agents, are, and at all times have been, in compliance in all material respects with all Health Care Laws. For purposes of this Agreement, "**Health Care Laws**" means: (i) the Federal Food, Drug, and Cosmetic Act and the regulations promulgated thereunder; (ii) all applicable federal, state, local and foreign health care fraud and abuse laws, including, without limitation, the U.S. Anti-Kickback Statute (42 U.S.C. Section 1320a-7b(b)), the U.S. Civil False Claims Act (31 U.S.C. Section 3729 et seq.), the criminal False Statements Law (42 U.S.C. Section 1320a-7b(a)), 18 U.S.C. Sections 286, 287, 1035, 1347, and 1349 the health care fraud criminal provisions under HIPAA, the civil monetary penalties law (42 U.S.C. Section 1320a-7a), the exclusions law (42 U.S.C. Section 1320a-7), the Physician Payments Sunshine Act (42 U.S.C. Section 1320-7h), and the laws governing U.S. government funded or sponsored healthcare programs; and (iii) similar local, state, federal, national, supranational and foreign laws the directives and regulations promulgated pursuant to such statutes and any state or non-U.S. counterpart thereof. Neither the Company nor any of its subsidiaries has received written notice of any claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action from any court or arbitrator or governmental or regulatory authority or third party alleging that any product operation or activity is in violation of any Health Care Laws nor, to the Company's knowledge, is any such claim, action, suit, proceeding, hearing, enforcement, investigation, arbitration or other action threatened. The Company, and to the Company's knowledge, its subsidiaries, have filed, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required by any Health Care Laws, and all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were complete and accurate on the date filed in all material respects (or were corrected or supplemented by a subsequent submission). Neither the Company, any of its subsidiaries, nor, to the Company's knowledge, any of their respective employees, officers, directors, or agents is a party to any corporate integrity agreements, monitoring agreements, consent decrees, settlement orders, or similar agreements with or imposed by any governmental or regulatory authority. Additionally, neither the Company, any of its subsidiaries nor any of their respective employees, officers, directors, or agents has been excluded, suspended or debarred from participation in any U.S. federal health care program or human clinical research or, to the knowledge of the Company, is subject to a governmental inquiry, investigation, proceeding, or other similar action that could reasonably be expected to result in debarment, suspension, or exclusion.

(aa) No relationship, direct or indirect, exists between or among the Company or any of its subsidiaries, on the one hand, and the directors, officers, stockholders, customers, suppliers or other affiliates of the Company or any of its subsidiaries, on the other, that is required by the Securities Act to be described in each of the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, and that is not so described in such documents.

(bb) The Company is not and, after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, will not be required to register as an “investment company” or an entity “controlled” by an “investment company” within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder (collectively, the “**Investment Company Act**”).

(cc) The Company and its subsidiaries have paid all federal, state, local and foreign taxes and filed all tax returns required to be paid or filed through the date hereof except for taxes being contested in good faith and for which reserves in accordance with GAAP have been taken; and except as otherwise disclosed in each of the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, there is no tax deficiency that has been, or could reasonably be expected to be, asserted against the Company or any of its subsidiaries or any of their respective properties or assets that would individually or in the aggregate, have a Material Adverse Effect.

(dd) To the Company’s knowledge, the Company and its subsidiaries possess all licenses, certificates, permits and other authorizations, other than with respect to its Intellectual Property, issued by, and have made all declarations and filings with, the appropriate and applicable federal, state, local or foreign governmental or regulatory authorities that are necessary for the ownership or lease of their respective properties or the conduct of their respective businesses as described in each of the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, except where the failure to possess or make the same would not, individually or in the aggregate, have a Material Adverse Effect; and neither the Company nor any of its subsidiaries has received written notice of any revocation or modification of any such license, certificate, permit or authorization or has any reason to believe that any such license, certificate, permit or authorization will not be renewed in the ordinary course, except where such revocation, modification or nonrenewal would not reasonably be expected to have a Material Adverse Effect. To the Company’s knowledge, no party granting any such licenses, certificates, permits and other authorizations has taken any action to limit, suspend or revoke the same in any material respect. The Company and its subsidiaries have filed, obtained, maintained or submitted all material reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments as required and that all such reports, documents, forms, notices, applications, records, claims, submissions and supplements or amendments were materially complete and correct on the date filed (or were corrected or supplemented by a subsequent submission) as required for maintenance of their licenses, certificates, permits and other authorizations that are necessary for the conduct of their respective businesses.

(ee) *No Labor Disputes.* No labor disturbance by or dispute with employees of the Company or any of its subsidiaries exists or, to the knowledge of the Company, is contemplated or threatened, and the Company is not aware of any existing or imminent labor disturbance by, or dispute with, the employees of any of its or its subsidiaries’ principal suppliers, contractors or customers, except as would not have a Material Adverse Effect. Neither the Company nor any of its subsidiaries has received any notice of cancellation or termination with respect to any collective bargaining agreement to which it is a party.

(ff) (i) The Company and its subsidiaries (x) are in compliance with all, and have not violated any, applicable federal, state, local and foreign laws (including common law), rules, regulations, requirements, decisions, judgments, decrees, orders and other legally enforceable requirements relating to pollution or the protection of human health or safety, the environment, natural resources, hazardous or toxic substances or wastes, pollutants or contaminants (collectively, “**Environmental Laws**”); (y) have received and are in compliance with all, and have not violated any, permits, licenses, certificates or other authorizations or approvals required of them under any Environmental Laws to conduct their respective businesses; and (z) have not received notice of any actual or potential liability or obligation under or relating to, or any actual or potential violation of, any Environmental Laws, including for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, and have no knowledge of any event or condition that would reasonably be expected to result in any such notice, and (ii) there are no costs or liabilities associated with Environmental Laws of or relating to the Company or its subsidiaries, except in the case of each of (i) and (ii) above, for any such matter as would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect; and (iii) (x) there is no proceeding that is pending, or that is known to be contemplated, against the Company or any of its subsidiaries under any Environmental Laws in which a governmental entity is also a party, other than such proceeding regarding which it is reasonably believed no monetary sanctions of \$100,000 or more will be imposed, (y) the Company and its subsidiaries are not aware of any facts or issues regarding compliance with Environmental Laws, or liabilities or other obligations under Environmental Laws or concerning hazardous or toxic substances or wastes, pollutants or contaminants, that could reasonably be expected to have a material effect on the capital expenditures, earnings or competitive position of the Company and its subsidiaries, and (z) none of the Company or its subsidiaries anticipates material capital expenditures relating to any Environmental Laws.

(gg) There has been no storage, generation, transportation, use, handling, treatment, Release or threat of Release of Hazardous Materials by, relating to or caused by the Company or any of its subsidiaries (or, to the knowledge of the Company and its subsidiaries, any other entity (including any predecessor) for whose acts or omissions the Company or any of its subsidiaries is or would reasonably be expected to be liable) at, on, under or from any property or facility now or previously owned, operated or leased by the Company or any of its subsidiaries, or at, on, under or from any other property or facility, in violation of any Environmental Laws or in a manner or amount or to a location that could reasonably be expected to result in any liability under any Environmental Law, except for any violation or liability which would not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. “**Hazardous Materials**” means any material, chemical, substance, waste, pollutant, contaminant, compound, mixture, or constituent thereof, in any form or amount, including petroleum (including crude oil or any fraction thereof) and petroleum products, natural gas liquids, asbestos and asbestos containing materials, naturally occurring radioactive materials, brine, and drilling mud, regulated or which can give rise to liability under any Environmental Law. “**Release**” means any spilling, leaking, seepage, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing, depositing, dispersing, or migrating in, into or through the environment, or in, into from or through any building or structure.

(hh) (i) Each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended (“ERISA”), for which the Company or any member of its “Controlled Group” (defined as any entity, whether or not incorporated, that is under common control with the Company within the meaning of Section 4001(a)(14) of ERISA or any entity that would be regarded as a single employer with the Company under Section 414(b),(c),(m) or (o) of the Internal Revenue Code of 1986, as amended (the “Code”)) would have any liability (each, a “Plan”) has been maintained in compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to ERISA and the Code; (ii) no prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any Plan, excluding transactions effected pursuant to a statutory or administrative exemption; (iii) for each Plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no Plan has failed (whether or not waived), or is reasonably expected to fail, to satisfy the minimum funding standards (within the meaning of Section 302 of ERISA or Section 412 of the Code) applicable to such Plan; (iv) no Plan is, or is reasonably expected to be, in “at risk status” (within the meaning of Section 303(i) of ERISA) and no Plan that is a “multiemployer plan” within the meaning of Section 4001(a)(3) of ERISA is in “endangered status” or “critical status” (within the meaning of Sections 304 and 305 of ERISA) (v) the fair market value of the assets of each Plan exceeds the present value of all benefits accrued under such Plan (determined based on those assumptions used to fund such Plan); (vi) no “reportable event” (within the meaning of Section 4043(c) of ERISA and the regulations promulgated thereunder) has occurred or is reasonably expected to occur; (vii) each Plan that is intended to be qualified under Section 401(a) of the Code is so qualified, and nothing has occurred, whether by action or by failure to act, which would cause the loss of such qualification; (viii) neither the Company nor any member of the Controlled Group has incurred, nor reasonably expects to incur, any liability under Title IV of ERISA (other than contributions to the Plan or premiums to the Pension Benefit Guarantee Corporation, in the ordinary course and without default) in respect of a Plan (including a “multiemployer plan” within the meaning of Section 4001(a)(3) of ERISA); and (ix) none of the following events has occurred or is reasonably likely to occur: (A) a material increase in the aggregate amount of contributions required to be made to all Plans by the Company or its Controlled Group affiliates in the current fiscal year of the Company and its Controlled Group affiliates compared to the amount of such contributions made in the Company’s and its Controlled Group affiliates’ most recently completed fiscal year; or (B) a material increase in the Company and its subsidiaries’ “accumulated post-retirement benefit obligations” (within the meaning of Accounting Standards Codification Topic 715-60) compared to the amount of such obligations in the Company and its subsidiaries’ most recently completed fiscal year, except in each case with respect to the events or conditions set forth in (i) through (ix) hereof, as would not, individually or in the aggregate, have a Material Adverse Effect.

(ii) The Company and its subsidiaries maintain an effective system of “disclosure controls and procedures” (as defined in Rule 13a-15(e) of the Exchange Act) that is designed to comply with the requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission’s rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company’s management as appropriate to allow timely decisions regarding required disclosure. The Company and its subsidiaries have carried out evaluations of the effectiveness of their disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act.

(jj) The Company and its subsidiaries maintain systems of “internal control over financial reporting” (as defined in Rule 13a-15(f) of the Exchange Act) that are designed to comply with the requirements of the Exchange Act and have been designed by, or under the supervision of, their respective principal executive and principal financial officers, or persons performing similar functions, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, including, but not limited to internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management’s general or specific authorization; (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences and (v) interactive data in eXtensible Business Reporting Language (“**XBRL Data**”) included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and is prepared in accordance with the Commission’s rules and guidelines applicable thereto. Based on the Company’s most recent evaluation of its internal controls over financial reporting pursuant to Rule 13a-15(c) of the Exchange Act, there are no material weaknesses or, except as disclosed to the Agent in connection with the signing of this Agreement, significant deficiencies in the Company’s internal control over financial reporting. The Company’s auditors and the Audit Committee of the Board of Directors of the Company have been advised of: (i) all significant deficiencies and material weaknesses in the design or operation of internal controls over financial reporting which have adversely affected or are reasonably likely to adversely affect the Company’s ability to record, process, summarize and report financial information; and (ii) to the best knowledge of the Company, any fraud, whether or not material, that involves management or other employees who have a significant role in the Company’s internal controls over financial reporting.

(kk) The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission’s rules and guidelines applicable thereto

(ll) The Company and its subsidiaries have insurance covering their respective properties, operations, personnel and businesses, including business interruption insurance, which insurance is in amounts and insures against such losses and risks as are generally maintained by companies engaged in the same or similar business and which the Company reasonably believes are adequate to protect the Company and its subsidiaries and their respective businesses; and neither the Company nor any of its subsidiaries has (i) received notice from any insurer or agent of such insurer that capital improvements or other expenditures are required or necessary to be made in order to continue such insurance or (ii) any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage at reasonable cost from similar insurers as may be necessary to continue its business.



(mm) Neither the Company nor any of its subsidiaries nor any director, officer or employee of the Company or any of its subsidiaries nor, to the knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company or any of its subsidiaries has (i) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (ii) made or taken an act in furtherance of an offer, promise or authorization of any direct or indirect unlawful payment or benefit to any foreign or domestic government or regulatory official or employee, including of any government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office; (iii) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977, as amended, or any applicable law or regulation implementing the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, or committed an offence under the Bribery Act 2010 of the United Kingdom or any other applicable anti-bribery or anti-corruption laws; or (iv) made, offered, agreed, requested or taken an act in furtherance of any unlawful bribe or other unlawful benefit, including, without limitation, any rebate, payoff, influence payment, kickback or other unlawful or improper payment or benefit. The Company and its subsidiaries have instituted, maintain and enforce, and will continue to maintain and enforce policies and procedures designed to promote and ensure compliance with all applicable anti-bribery and anti-corruption laws.

(nn) The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements, including those of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the applicable money laundering statutes of all jurisdictions where the Company or any of its subsidiaries conducts business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines issued, administered or enforced by any governmental or regulatory agency (collectively, the “Anti-Money Laundering Laws”) and no action, suit or proceeding by or before any court or governmental or regulatory agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the knowledge of the Company, threatened.

(oo) Neither the Company nor any of its subsidiaries, directors, officers, or employees, nor, to the knowledge of the Company, any agent, affiliate or other person associated with or acting on behalf of the Company or any of its subsidiaries is an individual or entity (“Person”) that is, or is owned or controlled by one or more Persons that are (i) currently the subject or the target of any sanctions administered or enforced by the U.S. government, (including, without limitation, the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State and including, without limitation, the designation as a “specially designated national” or “blocked person”), the United Nations Security Council, the European Union, Her Majesty’s Treasury or other relevant sanctions authority (collectively, “Sanctions”), or (ii) located, organized or resident in a country or territory that is the subject or target of Sanctions, including, without limitation, Cuba, Iran, North Korea, Syria and the Crimea Region of the Ukraine (each, a “Sanctioned Country”); and the Company will not directly or indirectly use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person that, at the time of such funding or facilitation, is the subject or target of Sanctions, (ii) to fund or facilitate any activities of or business in any Sanctioned Country or (iii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions. Since the Company’s inception, the Company and its subsidiaries have not knowingly engaged in and are not now knowingly engaged in any dealings or transactions with any person that at the time of the dealing or transaction is or was the subject or the target of Sanctions or with any Sanctioned Country.

(pp) No subsidiary of the Company is currently prohibited, directly or indirectly, under any agreement or other instrument to which it is a party or is subject, from paying any dividends to the Company, from making any other distribution on such subsidiary's capital stock, or similar ownership interest, from repaying to the Company any loans or advances to such subsidiary from the Company or from transferring any of such subsidiary's properties or assets to the Company or any other subsidiary of the Company.

(qq) Neither the Company nor any of its subsidiaries is a party to any contract, agreement or understanding with any person (other than this Agreement or any Terms Agreement) that would give rise to a valid claim against the Company or any of its subsidiaries or the Agent for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Shares.

(rr) No person has the right to require the Company or any of its subsidiaries to register any securities for sale under the Act by reason of the filing of the Registration Statement with the Commission or the offering, issuance or sale of the Shares, other than those rights that have been duly and validly waived.

(ss) Neither the Company nor any of its subsidiaries or, to the knowledge of the Company, affiliates has taken, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the Shares.

(tt) The application of the proceeds received by the Company from the issuance, sale and delivery of the Shares as described in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus will not violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(uu) There is and has been no failure on the part of the Company or, to the knowledge of the Company, any of the Company's directors or officers, in their capacities as such, to comply with any applicable provision of the Sarbanes-Oxley Act of 2002, as amended, and the rules and regulations promulgated in connection therewith (the "**Sarbanes-Oxley Act**"), including Section 402 related to loans and Sections 302 and 906 related to certifications.

(vv) No forward-looking statement (within the meaning of Section 27A of the Act and Section 21E of the Exchange Act) contained or incorporated by reference in the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(ww) Nothing has come to the attention of the Company that has caused the Company to believe that the statistical and market-related data included or incorporated by reference in the Registration Statement, any Permitted Free Writing Prospectus and the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects.

(xx) All of the Shares that have been or may be sold under this Agreement and any Terms Agreement have been approved for listing, subject only to official notice of issuance, on the Exchange.

(yy) The Common Stock is an “actively-traded security” excepted from the requirements of Rule 101 of Regulation M under the Exchange Act by Rule 101 (c)(1) thereunder.

(zz) (A) There has been no security breach or incident, unauthorized access or disclosure, or other compromise of or relating to the Company and its subsidiaries’ information technology assets and equipment, computers, systems, networks, hardware, software, websites, applications, technology, data and databases (including the data and information of their respective customers, employees, suppliers, vendors and any third party data maintained, processed or stored by the Company and its subsidiaries, Personal Data (defined below) and any such data processed or stored by third parties on behalf of the Company and its subsidiaries) collectively, “IT Systems and Data”); (B) The IT Systems and Data are adequate for, and operate and perform in all material respects as required in connection with the operation of the business of the Company and the subsidiaries as currently conducted, free and clear of all material bugs, errors, defects, Trojan horses, time bombs, malware and other corruptants; and (C) The Company and its subsidiaries have implemented and maintained appropriate controls, policies, procedures, and technical safeguards to maintain and protect their material confidential information and the integrity, continuous operation, redundancy and security of all IT Systems and Data (including all personal, personally identifiable, sensitive, confidential or regulated data (“Personal Data”)) reasonably consistent with industry standards and practices or as required by applicable regulatory standards. The Company and its subsidiaries have been and are presently in material compliance with all applicable laws or statutes and all judgments, orders, rules and regulations of any court or arbitrator or governmental or regulatory authority, internal policies and contractual obligations relating to the privacy and security of IT Systems and Data and to the protection of such IT Systems and Data from unauthorized use, access, misappropriation or modification.

(aaa) Any certificate signed by any officer, general partner, managing member or other authorized representative of the Company or any subsidiary of the Company and delivered to the Agent or to counsel to the Agent pursuant to or in connection with this Agreement or any Terms Agreement shall be deemed a representation and warranty by the Company to the Agent as to the matters covered thereby.

4. Certain Covenants of the Company. The Company hereby agrees with the Agent:

(a) For so long as the delivery of a prospectus is required (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with the offering or sale of Shares, before using or filing any Permitted Free Writing Prospectus and before using or filing any amendment or supplement to the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus (in each case, other than due to the filing of an Incorporated Document), to furnish to the Agent a copy of each such proposed Permitted Free Writing Prospectus, amendment or supplement within a reasonable period of time before filing with the Commission or using any such Permitted Free Writing Prospectus, amendment or supplement and the Company will not use or file any such Permitted Free Writing Prospectus or any such proposed amendment or supplement to which the Agent reasonably objects, unless the Company's legal counsel has advised the Company that use or filing of such document is required by law; and the Company will not use or file any such Permitted Free Writing Prospectus or proposed, amendment or supplement to which the Agent reasonably objects unless the Company's legal counsel has advised the Company that use or filing of such document is required by law.

(b) After the date of this Agreement, the Company shall promptly advise the Agent in writing (i) of the receipt of any comments of, or requests for additional or supplemental information from, the Commission; (ii) of the time and date of any filing of any post-effective amendment to the Registration Statement, any Rule 462(b) Registration Statement or any amendment or supplement to the Prospectus, any Free Writing Prospectus; (iii) of the time and date that any post-effective amendment to the Registration Statement or any Rule 462(b) Registration Statement becomes effective; (iv) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or any post-effective amendment thereto, any Rule 462(b) Registration Statement or any amendment or supplement to the Prospectus or of any order preventing or suspending the use of any Free Writing Prospectus or the Prospectus, or of any proceedings to remove, suspend or terminate from listing or quotation the Shares from any securities exchange upon which they are listed for trading or included or designated for quotation, or of the threatening or initiation of any proceedings for any of such purposes; and (v) of the Company losing its status as a "well-known seasoned issuer" (as defined in Rule 405) as of the time the Company files with the Commission an annual report on Form 10-K. If the Commission shall enter any such stop order at any time, the Company will use its best efforts to obtain the lifting of such order as soon as practicable. Additionally, the Company agrees that it shall comply with the provisions of Rule 424(b) and Rule 433, as applicable, under the Securities Act and will use its reasonable efforts to confirm that any filings made by the Company under such Rule 424(b) or Rule 433 were received in a timely manner by the Commission.

(c) To file the Prospectus, each Prospectus Supplement and any other amendments or supplements to the Prospectus pursuant to, and within the time period required by, Rule 424(b) under the Act (without reference to Rule 424(b)(8)) and to file any Permitted Free Writing Prospectus to the extent required by Rule 433 under the Act and to provide copies of the Prospectus, each Prospectus Supplement, any other amendments or supplements to the Prospectus and each Permitted Free Writing Prospectus (to the extent not previously delivered or filed on the Commission's Electronic Data Gathering, Analysis and Retrieval system or any successor system thereto (collectively, "EDGAR")) to the Agent via e-mail in ".pdf" format within a reasonable time after such filing date to an e-mail account designated by the Agent and, at the Agent's request, to also furnish copies of the Prospectus, each Prospectus Supplement, any other amendments or supplements to the Prospectus and each Permitted Free Writing Prospectus to each exchange or market on which sales were effected as may be required by the rules or regulations of such exchange or market.

(d) To file timely all reports and any definitive proxy or information statements required to be filed by the Company with the Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act for so long as the delivery of a prospectus is required (whether physically or through compliance with Rule 172 under the Act or any similar rule) in connection with the offering or sale of the Shares, and during such same period to advise the Agent, promptly after the Company receives notice thereof, (i) of the time when any amendment to the Registration Statement has been filed or has become effective or any supplement to the Prospectus or any Permitted Free Writing Prospectus or any amended Prospectus has been filed with the Commission; (ii) of the issuance by the Commission of any stop order or any order preventing or suspending the use of any prospectus relating to the Shares or the initiation or threatening of any proceeding for that purpose, pursuant to Section 8A of the Act; (iii) of any objection by the Commission to the use of Form S-3ASR by the Company pursuant to Rule 401(g)(2) under the Act; (iv) of the suspension of the qualification of the Shares for offering or sale in any jurisdiction or of the initiation or threatening of any proceeding for any such purpose; (v) of any request by the Commission for the amendment of the Registration Statement or the amendment or supplementation of the Prospectus (in each case including any documents incorporated by reference therein) or for additional information; (vi) of the occurrence of any event as a result of which the Prospectus or any Permitted Free Writing Prospectus as then amended or supplemented includes any untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances existing when the Prospectus or any such Permitted Free Writing Prospectus is delivered to a purchaser, not misleading; and (vii) of the receipt by the Company of any notice of objection of the Commission to the use of the Registration Statement or any post-effective amendment thereto.

(e) In the event of the issuance of any such stop order or of any such order preventing or suspending the use of any such prospectus or suspending any such qualification, or of any notice of objection pursuant to Rule 401(g)(2) under the Act, to use promptly its commercially reasonable efforts to obtain its withdrawal.

(f) To furnish such information as may be required and otherwise cooperate in qualifying the Shares for offering and sale under the securities or blue sky laws of such states or other jurisdictions as the Agent may reasonably designate and to maintain such qualifications in effect so long as required for the distribution of the Shares; provided that the Company shall not be required to qualify as a foreign corporation, become a dealer of securities, or become subject to taxation in, or to consent to the service of process under the laws of, any such state or other jurisdictions (except service of process with respect to the offering and sale of the Shares); and to promptly advise the Agent of the receipt by the Company of any notification with respect to the suspension of the qualification of the Shares for sale in any jurisdiction or the initiation of any proceeding for such purpose.

(g) To make available to the Agent, as soon as reasonably practicable after the Registration Statement becomes effective, and thereafter from time to time to furnish to the Agent, as many copies of the Prospectus and the Prospectus Supplement (or of the Prospectus or Prospectus Supplement as amended or supplemented if the Company shall have made any amendments or supplements thereto and documents incorporated by reference therein after the effective date of the Registration Statement) and each Permitted Free Writing Prospectus as the Agent may reasonably request for so long as the delivery of a prospectus is required (whether physically or through compliance with Rule 172 under the Act or any similar rule); provided, however, that the Company shall have no obligation to provide the Agent with any document filed on EDGAR or included on the Company's Internet website; and for so long as this Agreement is in effect, the Company will prepare and file promptly such amendment or amendments to the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus as may be necessary to comply with the requirements of Section 10(a)(3) of the Act.

(h) To furnish or make available to the Agent during the Term (i) copies of any reports or other communications which the Company shall send to its stockholders or shall from time to time publish or publicly disseminate and (ii) copies of all annual, quarterly and current reports filed with the Commission on Forms 10-K, 10-Q and 8-K, or such other similar form as may be designated by the Commission, and to furnish to the Agent from time to time during the Term such other information as the Agent may reasonably request regarding the Company or its subsidiaries, in each case as soon as such reports, communications, documents or information becomes available or promptly upon the request of the Agent, as applicable; provided, however, that the Company shall have no obligation to provide the Agent with any document filed on EDGAR or included on the Company's Internet website.

(i) If, at any time during the Term, any event shall occur or condition shall exist as a result of which it is necessary in the reasonable opinion of counsel for the Agent or counsel for the Company, to further amend or supplement the Prospectus or any Permitted Free Writing Prospectus as then amended or supplemented in order that the Prospectus or any such Permitted Free Writing Prospectus will not include an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading, in light of the circumstances existing at the time the Prospectus or any such Permitted Free Writing Prospectus is delivered to a purchaser, or if it shall be necessary, in the reasonable opinion of either such counsel, to amend or supplement the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus in order to comply with the requirements of the Act, in the case of such a determination by counsel to the Company, prompt notice shall be given, and confirmed in writing, to the Agent to cease the solicitation of offers to purchase the Shares in the Agent's capacity as agent, and, in either case, the Company will, subject to Section 4(a) above, promptly prepare and file with the Commission such amendment or supplement, whether by filing documents pursuant to the Act, the Exchange Act or otherwise, as may be necessary to correct such untrue statement or omission or to make the Registration Statement, the Prospectus or any such Permitted Free Writing Prospectus comply with such requirements.

(j) To generally make available to its security holders as soon as reasonably practicable, but not later than 16 months after the first day of each fiscal quarter referred to below, an earnings statement (in form complying with the provisions of Section 11(a) under the Act and Rule 158 of the Commission promulgated thereunder) covering each twelve-month period beginning, in each case, not later than the first day of the Company's fiscal quarter next following each "effective date" (as defined in such Rule 158) of the Registration Statement with respect to each sale of Shares, it being understood and agreed that such earnings statement shall be deemed to have been made available by the Company if the Company is in compliance with its reporting obligations pursuant to the Exchange Act, if such compliance satisfies the conditions of Rule 158, and if such earnings statement is made available on EDGAR.

(k) To apply the net proceeds from the sale of the Shares in the manner described in the Prospectus Supplement under the caption “Use of Proceeds.”

(l) Not to, and to cause its subsidiaries not to, take, directly or indirectly, any action designed to cause or result in, or that constitutes or might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Shares; *provided* that nothing herein shall prevent the Company from filing or submitting reports under the Exchange Act or issuing press releases in the ordinary course of business.

(m) Except as otherwise agreed between the Company and the Agent, to pay all costs, expenses, fees and taxes in connection with (i) the preparation and filing of the Registration Statement, the Prospectus, any Permitted Free Writing Prospectus, and any amendments or supplements thereto, and the printing and furnishing of copies of each thereof to the Agent and to dealers (including costs of mailing and shipment), (ii) the registration, issue and delivery of the Shares, (iii) the qualification of the Shares for offering and sale under the securities or blue sky laws of such states or other jurisdictions as the Agent may reasonably designate as aforesaid (including filing fees and the reasonable legal fees and disbursements of counsel to the Agent in connection therewith) and the printing and furnishing of copies of any blue sky surveys to the Agent, (iv) the listing of the Shares on the Exchange and any registration thereof under the Exchange Act, (v) any filing for review, and any review, of the public offering of the Shares by FINRA (including filing fees and the reasonable legal fees and disbursements of counsel to the Agent in connection therewith), (vi) the fees and disbursements of counsel to the Company and of the Company’s independent registered public accounting firm, (vii) the performance of the Company’s other obligations hereunder and under any Terms Agreement and (viii) the documented out-of-pocket expenses of the Agent, including the reasonable fees and disbursements of counsel to the Agent in connection with this Agreement and ongoing services in connection with the transactions contemplated hereunder.

(n) With respect to the offering(s) contemplated by this Agreement or any Terms Agreement, the Company will not offer shares of Common Stock or any securities convertible into or exchangeable or exercisable for shares of the Common Stock in a manner in violation of the Act or the Exchange Act; and the Company will not distribute any offering material in connection with the offer and sale of the Shares, other than the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus and any amendments or supplements thereto.

(o) Unless the Company has given written notice to the Agent that the Company has suspended activity under this Agreement and there are no pending Agency Transactions or Principal Transactions, the Company will not, without (A) giving the Agent at least three Exchange Business Days' prior written notice specifying the nature of the proposed sale and the date of such proposed sale and (B) the Agent suspending activity under this program for such period of time as requested by the Company or deemed appropriate by the Agent in light of the proposed sale, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, hedge lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or other equity securities of the Company or any securities convertible into or exercisable, redeemable or exchangeable for Common Stock or other equity securities of the Company, or submit to, or file with, the Commission any registration statement under the Act with respect to any of the foregoing (other than a registration statement on Form S-8 or post-effective amendment to the Registration Statement), or publicly announce the intention to undertake any of the foregoing, or (ii) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of Common Stock or other equity securities of the Company, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of shares of Common Stock or other securities, in cash or otherwise. The foregoing sentence shall not apply to (A) Shares offered and sold under this Agreement or any Terms Agreement, (B) securities issued pursuant to any of the Company's equity incentive plans described in the Registration Statement and the Prospectus or upon the exercise of options granted thereunder or (C) the issuance of securities in connection with an acquisition, merger or sale or purchase of assets, other business combinations, joint ventures or strategic alliances (each a "**Business Transaction**") occurring after the date of this Agreement which are not used for capital raising purposes; provided, that the aggregate number of Common Shares issued, or issuable pursuant to the conversion or exchange of securities convertible into or exchangeable for Common Shares, in connection with such Business Transaction does not exceed 5% of the aggregate number of Common Shares outstanding immediately prior to such Business Transaction. Any lock-up provisions relating to a Principal Transaction shall be set forth in the applicable Terms Agreement.

(p) The Company will, pursuant to reasonable procedures developed in good faith, retain copies of each Permitted Free Writing Prospectus that is not filed with the Commission in accordance with Rule 433 under the Act.

(q) The Company will use commercially reasonable efforts to cause the Shares to be listed on the Exchange.

(r) The Company consents to the Agent trading in the Common Stock for the Agent's own account and for the account of its clients at the same time as sales of the Shares occur pursuant to this Agreement or any Terms Agreement.

(s) If immediately prior to the third anniversary (the "**Renewal Deadline**") of the initial effective date of the Registration Statement, the aggregate Gross Sales Price of Shares sold by the Company is less than the Maximum Amount and this Agreement has not expired or been terminated, the Company will, prior to the Renewal Deadline, file, if it has not already done so and is eligible to do so, a new automatic shelf registration statement relating to the Shares, in a form satisfactory to the Agent. If the Company is no longer eligible to file an automatic shelf registration statement, the Company will, prior to the Renewal Deadline, if it has not already done so, file a new shelf registration statement relating to the Shares, in a form satisfactory to the Agent, and will use its best efforts to cause such registration statement to be declared effective within 60 days after the Renewal Deadline. The Company will take all other action necessary or appropriate to permit the issuance and sale of the Shares to continue as contemplated in the expired registration statement relating to the Shares. References herein to the Registration Statement shall include such new automatic shelf registration statement or such new shelf registration statement, as the case may be.



5. Execution of Agreement. The Agent's obligations under this Agreement shall be subject to the satisfaction of the following conditions in connection with and on or prior to the date of the execution of this Agreement:

- (a) the Company shall have delivered to the Agent:
  - (i) an officers' certificate signed by two officers of the Company (one of whom shall be the Chief Financial Officer or other senior financial officer) certifying as to the matters set forth in Exhibit B hereto;
  - (ii) an opinion and, if not covered in such opinion, a negative assurance letter of Goodwin Procter LLP, counsel for the Company, addressed to the Agent and dated the date of this Agreement, in form and substance reasonably acceptable to the Agent;
  - (iii) a "comfort" letter from Deloitte & Touche LLP, addressed to the Agent and dated the date of this Agreement, addressing such matters as the Agent may reasonably request;
  - (iv) evidence reasonably satisfactory to the Agent and its counsel that the Shares have been approved for listing on the Exchange, subject only to notice of issuance on or before the date hereof;
  - (v) an opinion of Marshall, Gerstein & Borun LLP, intellectual property counsel for the Company addressed to the Agent and dated the date of this Agreement, in form and substance reasonably acceptable to the Agent;
  - (vi) resolutions duly adopted by the Company's board of directors, and certified by an officer of the Company, authorizing the Company's execution of this Agreement and the consummation by the Company of the transactions contemplated hereby, including the issuance and sale of the Shares; and
  - (vii) such other documents as the Agent shall reasonably request; and
- (b) The Agent shall have received a letter or letters, which shall include legal opinions and negative assurance statements, of Cooley LLP, counsel to the Agent, addressed to the Agent and dated the date of this Agreement, addressing such matters as the Agent may reasonably request.

6. Additional Covenants of the Company. The Company further covenants and agrees with the Agent as follows:

- (a) Each Transaction Proposal made by the Company that is accepted by the Agent by means of a Transaction Acceptance and each execution and delivery by the Company of a Terms Agreement shall be deemed to be (i) an affirmation that the representations, warranties and agreements of the Company herein contained and contained in any certificate delivered to the Agent pursuant hereto are true and correct as of such Time of Acceptance or the date of such Terms Agreement, as the case may be, and (ii) an undertaking that such representations, warranties and agreements will be true and correct on any applicable Time of Sale and Settlement Date, as though made at and as of each such time (it being understood that such representations, warranties and agreements shall relate to the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus as amended and supplemented to the time of such Transaction Acceptance or Terms Agreement, as the case may be).
- (b) Each time that (i) the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus shall be amended or supplemented (including, except as noted in the proviso at the end of this Section 6(b), by the filing of any Incorporated Document), (ii) there is a Principal Settlement Date pursuant to a Terms Agreement, or (iii) the Agent shall reasonably request (each date referred to clauses (i), (ii) and (iii) above, a “**Bring-Down Delivery Date**”), the Company shall, unless the Agent agrees otherwise, furnish or cause to be furnished to the Agent certificates, dated as of such Bring-Down Delivery Date and delivered within one Exchange Business Day after the applicable Bring-Down Delivery Date or, in the case of a Bring-Down Delivery Date resulting from a Principal Settlement Date, delivered on such Principal Settlement Date, of the same tenor as the certificates referred to in Sections 5(a)(i) hereof, modified as necessary to relate to the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus as amended and supplemented to the time of delivery of such certificates, and, if requested, a certificate signed by the Company's Chief Financial Officer, in form and substance reasonably acceptable to the Agent, certifying as to certain financial, numerical and statistical data not covered by the “comfort” letter referred to in Section 5(a)(iii) hereof or, in lieu of such certificates, certificates to the effect that the statements contained in the certificates referred to in Sections 5(a)(i) hereof and, if applicable, an updated certificate from the Chief Financial Officer, furnished to Agent are true and correct as of such Bring-Down Delivery Date as though made at and as of such date (except that such statements shall be deemed to relate to the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus as amended and supplemented to the time of delivery of such certificate); *provided, however*, that the filing of a Current Report on Form 8-K will not constitute a Bring-Down Delivery Date under clause (i) above unless either (A) (x) such Current Report on Form 8-K is filed at any time during which either a Transaction Acceptance is binding and the Company has not suspended the use thereof (and prior to the settlement of the Shares specified therein) or a prospectus relating to the Shares is required to be delivered under the Act (whether physically or through compliance with Rule 172 under the Act or any similar rule) or such Current Report on Form 8-K is filed at any time from and including the date of a Terms Agreement through and including the related Settlement Date and (y) the Agent has reasonably requested that such date be deemed to be a Bring-Down Delivery Date based upon the event or events reported in such Current Report on Form 8-K or (B) such Current Report on Form 8-K contains capsule financial information, historical or pro forma financial statements, supporting schedules or other financial data, including any Current Report on Form 8-K or part thereof under Item 2.02 of Regulation S-K of the Commission that is considered “filed” under the Exchange Act ; and *provided, further*, that an amendment or supplement to the Registration Statement or the Prospectus relating to the offering of other securities pursuant to the Registration Statement will not constitute a Bring-Down Delivery Date. The requirement to provide a certificate under this Section 6(b) shall be automatically waived for any Bring-Down Delivery Date occurring at a time at which no Agency Transactions or Principal Transactions are pending, which waiver shall continue until the earlier to occur of the date the Company delivers a Transaction Proposal or executes a Terms Agreement hereunder (which shall be deemed a Bring-Down Delivery Date) and the next occurring Bring-Down Delivery Date. Notwithstanding the foregoing, if the Company subsequently decides to sell Shares following a Bring-Down Delivery Date when the Company relied on such waiver and did not provide the Agents with a certificate under this Section 6(b), then before the Company delivers the Transaction Proposal or executes a Terms Agreement or the Agent sells any Shares, the Company shall provide the Agent with such certificate, dated the date such Transaction Proposal is delivered or Terms Agreement is executed.

(c) Each Bring-Down Delivery Date with respect to which the Company is obligated to deliver a certificate pursuant to Section 6(b) for which no waiver is applicable, the Company shall, unless the Agent agrees otherwise, cause to be furnished to Agent (A) the written opinion and, if not included in such opinion, negative assurance letter of Goodwin Procter LLP, counsel to the Company, and the written opinion and, if not included in such opinion, negative assurance letter of Cooley LLP, counsel to the Agents, each dated as of the applicable Bring-Down Delivery Date and delivered within one Exchange Business Day after the applicable Bring-Down Delivery Date or, in the case of a Bring-Down Delivery Date resulting from a Principal Settlement Date, dated and delivered on such Principal Settlement Date, of the same tenor as the opinions and letters referred to in Section 5(a)(ii) or Section 5(b) hereof, as applicable, but modified as necessary to relate to the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus as amended and supplemented to the time of delivery of such opinions and letters, or, in lieu of such opinions and letters, each such counsel shall furnish the Agent with a letter substantially to the effect that the Agent may rely on the opinion and letter of such counsel referred to in Section 5(a)(ii) or Section 5(b), as applicable, furnished to the Agent, to the same extent as though they were dated the date of such letter authorizing reliance (except that statements in such last opinion and letter of such counsel shall be deemed to relate to the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus as amended and supplemented to the time of delivery of such letters authorizing reliance).

(d) Each Bring-Down Delivery Date with respect to which the Company is obligated to deliver a certificate pursuant to Section 6(b) for which no waiver is applicable, the Company shall, unless the Agent agrees otherwise, cause Deloitte & Touche LLP to furnish to the Agent a “comfort” letter, dated as of the applicable Bring-Down Delivery Date and delivered within three (3) Exchange Business Day after the applicable Bring-Down Delivery Date or, in the case of a Bring-Down Delivery Date resulting from a Principal Settlement Date, delivered on such Principal Settlement Date, of the same tenor as the letter referred to in Section 5(a)(iii) hereof, but modified to relate to the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus as amended and supplemented to the date of such letter, and, if the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus shall include or incorporate by reference the financial statements of any entity or business (other than the consolidated financial statements of the Company and its subsidiaries), the Company shall, if requested by the Agent, cause a firm of independent public accountants to furnish to the Agent a “comfort” letter, dated as of the applicable Bring-Down Delivery Date and delivered within three (3) Exchange Business Day after the applicable Bring-Down Delivery Date or, in the case of a Bring-Down Delivery Date resulting from a Principal Settlement Date, delivered on such Principal Settlement Date, addressing such matters as the Agent may reasonably request.

(e) (i) No order suspending the effectiveness of the Registration Statement shall be in effect, and no proceeding for such purpose or pursuant to Section 8A under the Act shall be pending before or threatened by the Commission; the Prospectus and each Permitted Free Writing Prospectus shall have been timely filed with the Commission under the Act (in the case of a Permitted Free Writing Prospectus, to the extent required by Rule 433 under the Act); and all requests by the Commission for additional information shall have been complied with to the satisfaction of the Agent and no suspension of the qualification of the Shares for offering or sale in any jurisdiction, or of the initiation or threatening of any proceedings for any of such purposes, shall have occurred and be in effect at the time the Company delivers a Transaction Proposal to the Agent or the time the Agent delivers a Transaction Acceptance to the Company; and (ii) the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus shall not contain an untrue statement of material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading at the time the Company delivers a Transaction Proposal to the Agent or the time the Agent delivers a Transaction Acceptance to the Company.

(f) The Company shall reasonably cooperate with any reasonable due diligence review requested by the Agent or its counsel from time to time in connection with the transactions contemplated hereby or any Terms Agreement, including, without limitation, (i) at the commencement of each intended Purchase Date and any Time of Sale or Settlement Date, providing information and making available appropriate documents and appropriate corporate officers of the Company and, upon reasonable request, representatives of Deloitte & Touche LLP (and, if the Registration Statement, the Prospectus or any Permitted Free-Writing Prospectus shall include or incorporate by reference the financial statements of any entity or business (other than the consolidated financial statements of the Company and its subsidiaries), representatives of the independent public accountants that audited or reviewed such financial statements) for an update on diligence matters with representatives of the Agent and (ii) at each Bring-Down Delivery Date and otherwise as the Agent may reasonably request, providing information and making available documents and appropriate corporate officers of the Company and representatives of Deloitte & Touche LLP (and, if the Registration Statement, the Prospectus or any Permitted Free-Writing Prospectus shall include or incorporate by reference the financial statements of any entity or business (other than the consolidated financial statements of the Company and its subsidiaries), representatives of the independent public accountants that audited or reviewed such financial statements) for one or more due diligence sessions with representatives of the Agent and its counsel.

(g) The Company shall disclose, in its quarterly reports on Form 10-Q and in its annual report on Form 10-K and, if reasonably requested by the Agent, in supplements to the Prospectus to be filed by the Company with the Commission from time to time, the number of the Shares sold through the Agent under this Agreement and any Terms Agreement, and the gross and net proceeds to the Company from the sale of the Shares and the compensation paid by the Company with respect to sales of the Shares pursuant to this Agreement during the relevant quarter or, in the case of any such prospectus supplement, such shorter period as the Agent may reasonably request or, in the case of an Annual Report on Form 10-K, during the fiscal year covered by such Annual Report and the fourth quarter of such fiscal year.

All opinions, letters and other documents referred to in Sections 6(b) through (d) above shall be reasonably satisfactory in form and substance to the Agent. The Agent will provide the Company with such notice (which may be oral, and in such case, will be confirmed via e-mail as soon as reasonably practicable thereafter) as is reasonably practicable under the circumstances when requesting an opinion, letter or other document referred to in Sections 6(b) through (d) above.

7. Conditions of the Agent's Obligation. The Agent's obligation to solicit purchases on an agency basis for the Shares or otherwise take any action pursuant to a Transaction Acceptance and to purchase the Shares pursuant to any Terms Agreement shall be subject to the satisfaction of the following conditions:

(a) At the Time of Acceptance, at the time of the commencement of trading on the Exchange on the Purchase Date(s) and at the relevant Time of Sale and Agency Settlement Date, or with respect to a Principal Transaction pursuant to a Terms Agreement, at the time of execution and delivery of the Terms Agreement by the Company and at the relevant Time of Sale and Principal Settlement Date:

- (i) The representations, warranties and agreements on the part of the Company herein contained or contained in any certificate of an officer or officers, general partner, managing member or other authorized representative of the Company or any subsidiary of the Company delivered pursuant to the provisions hereof shall be true and correct in all respects.
- (ii) The Company shall have performed and observed its covenants and other obligations hereunder and/or under any Terms Agreement, as the case may be, in all material respects.
- (iii) In the case of an Agency Transaction, from the Time of Acceptance until the Agency Settlement Date, or, in the case of a Principal Transaction pursuant to a Terms Agreement, from the time of execution and delivery of the Terms Agreement by the Company until the Principal Settlement Date, trading in the Common Stock on the Exchange shall not have been suspended.

- (iv) From the date of this Agreement, no event or condition of a type described in Section 3(e) hereof shall have occurred or shall exist, which event or condition is not described in a Permitted Free Writing Prospectus (excluding any amendment or supplement thereto) or the Prospectus (excluding any amendment or supplement thereto) and the effect of which in the judgment of the Agent makes it impracticable or inadvisable to proceed with the offering, sale or delivery of the Shares on the applicable Settlement Date on the terms and in the manner contemplated by this Agreement, any Terms Agreement, any Permitted Free Writing Prospectus and the Prospectus.
- (v) Subsequent to the relevant Time of Acceptance or, in the case of a Principal Transaction, subsequent to execution of the applicable Terms Agreement, (A) no downgrading shall have occurred in the rating accorded any debt securities or preferred equity securities of or guaranteed by the Company or any of its subsidiaries by any “nationally recognized statistical rating organization”, as such term is defined by the Commission for purposes of Section 3(a)(62) of the Exchange Act and (B) no such organization shall have publicly announced that it has under surveillance or review, or has changed its outlook with respect to, its rating of any debt securities or preferred equity securities of or guaranteed by the Company or any of its subsidiaries (other than an announcement with positive implications of a possible upgrading) in each case that has not been described in any Permitted Free Writing Prospectus issued prior to any related Time of Sale.
- (vi) The Shares to be issued pursuant to the Transaction Acceptance or pursuant to a Terms Agreement, as applicable, shall have been approved for listing on the Exchange, subject only to notice of issuance.
- (vii) (A) No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any federal, state or foreign governmental or regulatory authority that would, as of the relevant Settlement Date, prevent the issuance or sale of the Shares and (B) no injunction or order of any federal, state or foreign court shall have been issued that would, as of the relevant Settlement Date, prevent the issuance or sale of the Shares.
- (viii) (A) No order suspending the effectiveness of the Registration Statement shall be in effect, no proceeding for such purpose or pursuant to Section 8A of the Act shall be pending before or, to the knowledge of the Company, threatened by the Commission and no notice of objection of the Commission to the use of the Registration Statement pursuant to Rule 401(g)(2) under the Act shall have been received by the Company; (B) the Prospectus and each Permitted Free Writing Prospectus shall have been timely filed with the Commission under the Act (in the case of any Permitted Free Writing Prospectus, to the extent required by Rule 433 under the Act); (C) all requests by the Commission for additional information shall have been complied with to the satisfaction of the Agent; and (D) no suspension of the qualification of the Shares for offering or sale in any jurisdiction, and no initiation or threatening of any proceedings for any of such purposes, shall have occurred and be in effect. The Registration Statement, the Prospectus or any Permitted Free Writing Prospectus shall not contain an untrue statement of material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading at the time the Agent delivers a Transaction Acceptance to the Company or the Company and the Agent execute a Terms Agreement, as the case may be.

(ix) No amendment or supplement to the Registration Statement, the Prospectus or any Permitted Free Writing Prospectus shall have been filed to which the Agent shall have reasonably objected in writing.

(b) Within one Exchange Business Day after the applicable Bring-Down Delivery Date or, in the case of a Bring-Down Delivery Date resulting from a Principal Settlement Date, on such Principal Settlement Date, the Agent shall have received the officer's certificates, opinions and negative assurance letters of counsel and "comfort" letters and other documents provided for under Sections 6(b) through (d), inclusive. For purposes of clarity and without limitation to any other provision of this Section 7 or elsewhere in this Agreement, the parties hereto agree that the Agent's obligations, if any, to solicit purchases of Shares on an agency basis or otherwise take any action pursuant to a Transaction Acceptance shall, unless otherwise agreed in writing by the Agent, be suspended during the period from and including a Bring-Down Delivery Date through and including the time that the Agent shall have received the documents described in the preceding sentence.

8. Termination.

- (a) (i) The Company may terminate this Agreement in its sole discretion at any time upon prior written notice to the Agent. Any such termination shall be without liability of any party to any other party, except that (A) with respect to any pending sale, the obligations of the Company, including in respect of compensation of the Agent, shall remain in full force and effect notwithstanding such termination; and (B) the provisions of Sections 3, 4 (except that if no Shares have been previously sold hereunder or under any Terms Agreement, only Section 4(l)), 9, 13, 14 and 16 of this Agreement shall remain in full force and effect notwithstanding such termination.
- (ii) In the case of any sale by the Company pursuant to a Terms Agreement, the obligations of the Company pursuant to such Terms Agreement and this Agreement may not be terminated by the Company without the prior written consent of the Agent.

- (b) (i) The Agent may terminate this Agreement in its sole discretion at any time upon giving prior written notice to the Company. Any such termination shall be without liability of any party to any other party, except that the provisions of Sections 3, 4 (except that if no Shares have been previously sold hereunder or under any Terms Agreement, only Section 4(l)), 9, 13, 14 and 16 of this Agreement shall remain in full force and effect notwithstanding such termination.
- (ii) In the case of any purchase by the Agent pursuant to a Terms Agreement, the obligations of the Agent pursuant to such Terms Agreement shall be subject to termination by the Agent at any time prior to or at the Principal Settlement Date if (A) since the time of execution of the Terms Agreement or the respective dates as of which information is given in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, (i) trading generally shall have been suspended or materially limited on or by any of the New York Stock Exchange, the Nasdaq Stock Market, the Chicago Board Options Exchange, the Chicago Mercantile Exchange or the Chicago Board of Trade; (ii) trading of any securities issued or guaranteed by the Company or any of its subsidiaries shall have been suspended on any exchange or in any over-the counter market, (iii) a general moratorium on commercial banking activities shall have been declared by federal or New York state authorities, (iv) there shall have occurred any outbreak or escalation of hostilities or any change in financial markets or any calamity or crisis, either within or outside the United States, that, solely in the case of events and conditions described in this clause (iv), in the Agent's judgment, is material and adverse and makes it impracticable or inadvisable to proceed with the offering, sale or delivery of the Shares on the terms and in the manner contemplated in the Prospectus or such Terms Agreement. If the Agent elects to terminate its obligations pursuant to this Section 8(b)(ii), the Company shall be notified promptly in writing.

(c) This Agreement shall remain in full force and effect until the earliest of (A) termination of the Agreement pursuant to Section 8(a) or 8(b) above or otherwise by mutual written agreement of the parties and (B) such date that the Maximum Amount has been sold in accordance with the terms of this Agreement and any Terms Agreements, in each case except that the provisions of Section 3, 4 (except that if no Shares have been previously sold hereunder or under any Terms Agreement, only Section 4(l)), 9, 13, 14 and 16 of this Agreement shall remain in full force and effect notwithstanding such termination.

(d) Any termination of this Agreement shall be effective on the date specified in such notice of termination; *provided* that, notwithstanding the foregoing, such termination shall not be effective until the close of business on the date of receipt of such notice by the Agent or the Company, as the case may be, or such later date as may be required pursuant to Section 8(a) or (b). If such termination shall occur prior to the Settlement Date for any sale of Shares, such sale shall settle in accordance with the provisions of Section 2 hereof.



9. Indemnity and Contribution.

(a) The Company agrees to indemnify and hold harmless the Agent, its affiliates, directors and officers and each person, if any, who controls the Agent within the meaning of Section 15 of the Act or Section 20 of the Exchange Act, from and against any and all losses, claims, damages and liabilities (including, without limitation, reasonable and documented out of pocket legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted, as such fees and expenses are incurred), that arise out of, or are based upon, (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (or any amendment thereto) or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary in order to make the statements therein, not misleading or (ii) any untrue statement or alleged untrue statement of a material fact contained in the Prospectus (or any amendment or supplement thereto), any Permitted Free Writing Prospectus (or any amendment or supplement thereto), any "issuer information" filed or required to be filed pursuant to Rule 433(d) under the Act or any road show as defined in Rule 433(h) under the Act (a "**road show**"), or caused by any omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading, in each case except insofar as such losses, claims, damages or liabilities arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to the Agent furnished to the Company in writing by the Agent expressly for use therein, it being understood and agreed that the only such information furnished by the Agent consists of the information described as such in subsection (b) below.

(b) The Agent agrees to indemnify and hold harmless the Company, its directors, its officers who signed the Registration Statement and each person, if any, who controls the Company within the meaning of Section 15 of the Act or Section 20 of the Exchange Act to the same extent as the indemnity set forth in paragraph (a) above, but only with respect to any losses, claims, damages or liabilities (including, without limitation, reasonable and documented out of pocket legal fees and other expenses incurred in connection with any suit, action or proceeding or any claim asserted, as such fees and expenses are incurred) that arise out of, or are based upon, any untrue statement or omission or alleged untrue statement or omission made in reliance upon and in conformity with any information relating to the Agent furnished to the Company in writing by the Agent expressly for use in the Registration Statement (or any amendment thereto), the Prospectus (or any amendment or supplement thereto), any Permitted Free Writing Prospectus (or any amendment or supplement thereto) or any road show, it being understood and agreed upon that such information shall consist solely of the following: the information appearing in the fourth paragraph under the caption "Plan of Distribution" in the Prospectus Supplement.

(c) If any suit, action, proceeding (including any governmental or regulatory investigation), claim or demand shall be brought or asserted against any person in respect of which indemnification may be sought pursuant to either Section 9(a) or 9(b) above, such person (the “**Indemnified Person**”) shall promptly notify the person against whom such indemnification may be sought (the “**Indemnifying Person**”) in writing; provided that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have under this Section 9 except to the extent that it has been materially prejudiced (through the forfeiture of substantive rights or defenses) by such failure; and provided, further, that the failure to notify the Indemnifying Person shall not relieve it from any liability that it may have to an Indemnified Person otherwise than under this Section 9. If any such proceeding shall be brought or asserted against an Indemnified Person and it shall have notified the Indemnifying Person thereof, the Indemnifying Person shall retain counsel reasonably satisfactory to the Indemnified Person (who shall not, without the consent of the Indemnified Person, be counsel to the Indemnifying Person) to represent the Indemnified Person and any others entitled to indemnification pursuant to this Section 9 that the Indemnifying Person may designate in such proceeding and shall pay the reasonable and documented fees and expenses of such counsel related to such proceeding, as incurred. In any such proceeding, any Indemnified Person shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such Indemnified Person unless (i) the Indemnifying Person and the Indemnified Person shall have mutually agreed to the contrary; (ii) the Indemnifying Person has failed within a reasonable time to retain counsel reasonably satisfactory to the Indemnified Person; (iii) the Indemnified Person shall have reasonably concluded that there may be legal defenses available to it that are different from or in addition to those available to the Indemnifying Person; or (iv) the named parties in any such proceeding (including any impleaded parties) included both the Indemnifying Person and the Indemnified Person and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood and agreed that the Indemnifying Person shall not, in connection with any proceeding or related proceeding in the same jurisdiction, be liable for the reasonable and documented fees and expenses of more than one separate firm (in addition to any local counsel) for (A) the Agent and its affiliates, directors and officers and its control persons, if any, or (B) the Company, its directors, its officers who signed the Registration Statement and its control persons, if any, as the case may be, and that all such reasonable and documented fees and expenses shall be paid or reimbursed as they are incurred. Any such separate firm for the Agent and its affiliates, directors and officers and its control persons, if any, shall be designated in writing by the Agent, and any such separate firm for the Company, its directors, its officers who signed the Registration Statement and its control persons, if any, shall be designated in writing by the Company. The Indemnifying Person shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the Indemnifying Person agrees to indemnify each Indemnified Person from and against any loss or liability by reason of such settlement or judgment. No Indemnifying Person shall, without the written consent of the Indemnified Person, effect any settlement of any pending or threatened proceeding in respect of which any Indemnified Person is or could have been a party and indemnification is or could have been sought hereunder by such Indemnified Person, unless such settlement (x) includes an unconditional release of such Indemnified Person, in form and substance reasonably satisfactory to such Indemnified Person, from all liability on claims that are the subject matter of such proceeding and (y) does not include any statement as to or any admission of fault, culpability or a failure to act by or on behalf of any Indemnified Person. Notwithstanding the foregoing sentence, if at any time an Indemnified Person shall have requested an Indemnifying Person to reimburse the Indemnified Person for reasonable and documented fees and expenses of counsel as contemplated by this Section 9(c), the Indemnifying Person agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into more than 30 days after receipt by such Indemnifying Person of the aforesaid request and (ii) such Indemnifying Person shall not have reimbursed the Indemnified Person in accordance with such request prior to the date of such settlement.

(d) If the indemnification provided for in Sections 9(a) and 9(b) above is unavailable to an Indemnified Person or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each Indemnifying Person under such Sections, in lieu of indemnifying such Indemnified Person thereunder, shall contribute to the amount paid or payable by such Indemnified Person as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the Company, on the one hand, and the Agent, on the other, from the offering of the Shares pursuant to this Agreement and any Terms Agreements or (ii) if the allocation provided by clause (i) is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) but also the relative fault of the Company, on the one hand, and the Agent, on the other, in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company, on the one hand, and the Agent, on the other, shall be deemed to be in the same respective proportions as the net proceeds (before deducting expenses) received by the Company from the sale of the Shares pursuant to this Agreement and any Terms Agreements and the total discounts and commissions received by the Agent in connection therewith bear to the aggregate Gross Sales Price of such Shares. The relative fault of the Company, on the one hand, and Agent, on the other, shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company, on the one hand, or by Agent, on the other hand, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission.

(e) The Company and the Agent agree that it would not be just and equitable if contribution pursuant to this Section 9 were determined by pro rata allocation or by any other method of allocation that does not take account of the equitable considerations referred to in Section 9(d) above. The amount paid or payable by an Indemnified Person as a result of the losses, claims, damages and liabilities referred to in Section 9(d) above shall be deemed to include, subject to the limitations set forth above, any reasonable and documented legal or other expenses incurred by such Indemnified Person in connection with any such action or claim. Notwithstanding the provisions of this Section 9, in no event shall the Agent be required to contribute any amount in excess of the amount by which the total discounts and commissions received by the Agent with respect to the offering of the Shares pursuant to this Agreement and any Terms Agreements exceeds the amount of any damages that the Agent has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

(f) The remedies provided for in this Section 9 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any Indemnified Person at law or in equity.

10. Notices. All notices and other communications under this Agreement and any Terms Agreement shall be in writing and shall be deemed to have been duly given if mailed or transmitted and confirmed by any standard form of communication, and, if to the Agent, shall be sufficient in all respects if delivered or sent to J.P. Morgan Securities LLC, 383 Madison Avenue, 7th Floor, New York, New York 10179, to the attention of Special Equities Group, Stephanie Little (email: stephanie.y.little@jpmorgan.com), and, if to the Company, shall be sufficient in all respects if delivered or sent to it at Akero Therapeutics, Inc., 170 Harbor Way, South San Francisco, California 94080; Attention: Chief Financial Officer (email bill@akerotx.com). Notwithstanding the foregoing, Transaction Proposals shall be delivered by the Company to the Agent by email to Stephanie Little at telephone number (312) 732-3229 or email to stephanie.y.little@jpmorgan.com; and Transaction Acceptances shall be delivered by the Agent to the Company by email to William White, Chief Financial Officer (email bill@akerotx.com).

11. No Fiduciary Relationship. The Company acknowledges and agrees that the Agent is acting solely in the capacity of an arm's length contractual counterparty to the Company with respect to the offering of Shares contemplated hereby and any Terms Agreements (including in connection with determining the terms of the offering) and not as a financial advisor or a fiduciary to, or an agent of, the Company or any other person. Additionally, the Agent is not advising the Company or any other person as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction. The Company shall consult with its own advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated hereby, and the Agent shall have no responsibility or liability to the Company with respect thereto. Any review by the Agent of the Company, the transactions contemplated hereby or other matters relating to such transactions will be performed solely for the benefit of the Agent and shall not be on behalf of the Company.

12. Adjustments for Stock Splits. The parties acknowledge and agree that all share related numbers contained in this Agreement, any Transaction Proposal and any Transaction Acceptance shall be adjusted to take into account any stock split effected with respect to the Shares.

13. Miscellaneous.

(a) *Governing Law*. This Agreement, any Terms Agreement and any claim, controversy or dispute arising under or relating to this Agreement or any Terms Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

(b) *Submission to Jurisdiction*. The Company hereby submits to the exclusive jurisdiction of the U.S. federal and New York state courts in the Borough of Manhattan in The City of New York in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby. The Company waives any objection which it may now or hereafter have to the laying of venue of any such suit or proceeding in such courts. The Company agrees that final judgment in any such suit, action or proceeding brought in such court shall be conclusive and binding upon the Company and may be enforced in any court to the jurisdiction of which Company is subject by a suit upon such judgment.

(c) Waiver of Jury Trial. Each of the parties hereto hereby waives any right to trial by jury in any suit or proceeding arising out of or relating to this Agreement and any Terms Agreement.

14. Persons Entitled to Benefit of Agreement. This Agreement and any Terms Agreement shall inure to the benefit of and be binding upon the parties hereto and thereto, respectively, and their respective successors and the officers, directors, affiliates and controlling persons referred to in Section 9 hereof. Nothing in this Agreement or any Terms Agreement is intended or shall be construed to give any other person any legal or equitable right, remedy or claim under or in respect of this Agreement or any such Terms Agreement or any provision contained herein or therein. No purchaser of Shares from or through the Agent shall be deemed to be a successor merely by reason of purchase.

15. Counterparts. This Agreement and any Terms Agreement may be signed in counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be an original and all of which together shall constitute one and the same instrument.

16. Survival. The respective indemnities, rights of contribution, representations, warranties and agreements of the Company and the Agent contained in this Agreement or any Terms Agreement or made by or on behalf of the Company or the Agent pursuant to this Agreement or any Terms Agreement or any certificate delivered pursuant hereto or thereto shall survive the delivery of and payment for the Shares and shall remain in full force and effect, regardless of any termination of this Agreement or any Terms Agreement or any investigation made by or on behalf of the Company or the Agent.

17. Certain Defined Terms. For purposes of this Agreement, except where otherwise expressly provided, the term “affiliate” has the meaning set forth in Rule 405 under Act; the term “business day” means any day other than a day on which banks are permitted or required to be closed in New York City; and the term “subsidiary” has the meaning set forth in Rule 405 under the Act.

18. Recognition of the U.S. Special Resolution Regimes.

(a) In the event that the Agent is a Covered Entity and becomes subject to a proceeding under a U.S. Special Resolution Regime, the transfer from the Agent of this Agreement or any Terms Agreement, and any interest and obligation in or under this Agreement or any Terms Agreement, will be effective to the same extent as the transfer would be effective under the U.S. Special Resolution Regime if this Agreement or any Terms Agreement, and any such interest and obligation, were governed by the laws of the United States or a state of the United States.

(b) In the event that the Agent is a Covered Entity and becomes, or a BHC Act Affiliate of the Agent, becomes subject to a proceeding under a U.S. Special Resolution Regime, Default Rights under this Agreement or any Terms Agreement that may be exercised against the Agent is permitted to be exercised to no greater extent than such Default Rights could be exercised under the U.S. Special Resolution Regime if this Agreement or any Terms Agreement were governed by the laws of the United States or a state of the United States.

As used in this Section 18:

“BHC Act Affiliate” has the meaning assigned to the term “affiliate” in, and shall be interpreted in accordance with, 12 U.S.C. § 1841(k).

“Covered Entity” means any of the following:

- (i) a “covered entity” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 252.82(b);
- (ii) a “covered bank” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 47.3(b); or
- (iii) a “covered FSI” as that term is defined in, and interpreted in accordance with, 12 C.F.R. § 382.2(b).

“Default Right” has the meaning assigned to that term in, and shall be interpreted in accordance with, 12 C.F.R. §§ 252.81, 47.2 or 382.1, as applicable.

“U.S. Special Resolution Regime” means each of (i) the Federal Deposit Insurance Act and the regulations promulgated thereunder and (ii) Title II of the Dodd-Frank Wall Street Reform and Consumer Protection Act and the regulations promulgated thereunder.

19. Compliance with USA Patriot Act. In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Agent is required to obtain, verify and record information that identifies its clients, including the Company, which information may include the name and address of its clients, as well as other information that will allow the Agent to properly identify its clients.

20. Amendments or Waivers. No amendment or waiver of any provision of this Agreement or any Terms Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties hereto or thereto as the case may be.

21. Headings. The headings herein and in any Terms Agreement are included for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement or any Terms Agreement.

22. Integration. This Agreement supersedes all prior agreements and understandings (whether written or oral) between the Company and the Agent, or any of them, with respect to the subject matter hereof.

[Signature Page Follows]

If the foregoing correctly sets forth the understanding between the Company and the Agent, please so indicate in the space provided below for that purpose, whereupon this letter and your acceptance shall constitute a binding agreement among the Company and the Agent.

Very truly yours,

AKERO THERAPEUTICS, INC.

By: /s/ Andrew Cheng

Name: Andrew Cheng

Title: President and Chief Executive Officer

Accepted and agreed to as of the  
date first above written:

J.P. MORGAN SECURITIES LLC

By: /s/ Stephanie Little

Name: Stephanie Little

Title: Executive Director

Authorized Company Representatives

Andrew Cheng, President and Chief Executive Officer

William White, Executive Vice President, Chief Financial Officer and Head of Corporate Development

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## Akero Therapeutics, Inc. Common Stock

**TERMS AGREEMENT**

\_\_\_\_\_, 20\_\_

J.P. Morgan Securities LLC  
383 Madison Avenue  
New York, New York 10179

Dear Sirs:

Akero Therapeutics, Inc., a Delaware corporation (the “**Company**”), proposes, subject to the terms and conditions stated herein and in the Distribution Agreement dated May 18, 2021 (the “**Distribution Agreement**”) between the Company and J.P. Morgan Securities LLC (the “**Agent**”), to issue and sell to the Agent the securities specified in the Schedule hereto (the “**Purchased Securities**”). Unless otherwise defined below, terms defined in the Distribution Agreement shall have the same meanings when used herein.

Each of the provisions of the Distribution Agreement not specifically related to the solicitation by the Agent, as agent of the Company, of offers to purchase securities is incorporated herein by reference in its entirety, and shall be deemed to be part of this Terms Agreement to the same extent as if such provisions had been set forth in full herein. Each of the representations, warranties and agreements set forth therein shall be deemed to have been made as of the date of this Terms Agreement and the Settlement Date set forth in the Schedule hereto.

An amendment to the Registration Statement or a supplement to the Prospectus, as the case may be, relating to the Purchased Securities, in the form heretofore delivered to the Agent, is now proposed to be filed with the Securities and Exchange Commission.

Subject to the terms and conditions set forth herein and in the Distribution Agreement which are incorporated herein by reference, the Company agrees to issue and sell to the Agent, and the latter agrees to purchase from the Company, the Purchased Securities at the time and place and at the purchase price set forth in the Schedule hereto.

Notwithstanding any provision of the Distribution Agreement or this Terms Agreement to the contrary, the Company consents to the Agent trading in the Common Stock for Agent’s own account and for the account of its clients at the same time as sales of the Purchased Securities occur pursuant to this Terms Agreement.

*[Signature Page Follows]*

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If the foregoing is in accordance with your understanding, please sign and return to us a counterpart hereof, whereupon this Terms Agreement, including those provisions of the Distribution Agreement incorporated herein by reference, shall constitute a binding agreement between the Agent and the Company.

**AKERO THERAPEUTICS, INC.**

By: \_\_\_\_\_  
Name:  
Title:

Accepted and agreed as of  
the date first above written:

J.P. MORGAN SECURITIES LLC

By: \_\_\_\_\_  
Name:  
Title:

## Schedule to Terms Agreement

Title of Purchased Securities:

Common Stock, par value \$0.0001 per share

Number of Shares of Purchased Securities:

[•] shares

Initial Price to Public:

[\$•] per share

Purchase Price Payable by the Agent:

[\$•] per share

Method of and Specified Funds for Payment of Purchase Price:

[By wire transfer to a bank account specified by the Company in same day funds.]

Method of Delivery:

[To the Agent's account, or the account of the Agent's designee, at The Depository Trust Company via DWAC in return for payment of the purchase price.]

Settlement Date:

[•], 20[•]

Closing Location:

[•]

Documents to be Delivered:

The following documents referred to in the Distribution Agreement shall be delivered on the Settlement Date as a condition to the closing for the Purchased Securities (which documents shall be dated on or as of the Settlement Date and shall be appropriately updated to cover any Permitted Free Writing Prospectuses and any amendments or supplements to the Registration Statement, the Prospectus, any Permitted Free Writing Prospectuses and any documents incorporated by reference therein):

- (1) the officer's certificate referred to in Section 5(a)(i);
- (2) the opinions and negative assurance letters of the Company's outside counsel referred to in Section 5(a)(ii);
- (3) the "comfort" letter referred to in Section 5(a)(iii);
- (4) the opinion of the Company's outside intellectual property counsel referred to in Section 5(a)(v);
- (5) the opinion and negative assurance letter referred to in Section 5(b); and
- (6) such other documents as the Agent shall reasonably request.

[Lockup:]

[•]

Time of sale: [•] [a.m./p.m.] (New York City time) on [•], [•]

Time of sale information:

- The number of shares of Purchased Securities set forth above
- The initial price to public set forth above
- **[Other]**

**OFFICERS' CERTIFICATE**

Dated \_\_\_\_\_, 20\_\_

We, Andrew Cheng, Chief Executive Officer and President, and William White, Executive Vice President, Chief Financial Officer and Head of Corporate Development of Akeru Therapeutics, Inc., a Delaware corporation (the "**Company**"), do hereby certify that this certificate is signed by us pursuant to the Distribution Agreement dated May 18, 2021 between the Company and J.P. Morgan Securities LLC (the "**Agreement**"), and do hereby further certify on behalf of the Company, as follows:

1. The representations and warranties of the Company in the Agreement are true and correct on and as of the date hereof as though made on and as of this date;
  2. The Company has performed all obligations and satisfied all conditions on its part to be performed or satisfied pursuant to the Agreement on or prior to the date hereof;
  3. The Company's Registration Statement (File No. 333[-]) and any post-effective amendments thereto have become effective under the Act; no stop order suspending the effectiveness of such Registration Statement has been issued and no proceeding for that purpose or pursuant to Section 8A of the Act has been initiated or, to the knowledge of the undersigned, threatened by the Commission; no notice of objection of the Commission to the use of such Registration Statement pursuant to Rule 401(g)(2) under the Act has been received by the Company; and all requests for additional information on the part of the Commission have been complied with; and
  4. Since the respective dates as of which information is given in the Registration Statement, the Prospectus and any Permitted Free Writing Prospectus, except as otherwise stated therein, (i) there has not been any material change in the capital stock (other than the issuance of shares of Common Stock upon exercise of stock options issued under, and the grant of options and awards under, equity incentive plans described in the Registration Statement and the Prospectus, the issuance of Shares pursuant to the Agreement) or short-term debt or long-term debt (except for borrowings and the repayment of borrowings in the ordinary course of business) of the Company or any of its subsidiaries, or any dividend or distribution of any kind declared, set aside for payment, paid or made by the Company on any class of capital stock (other than regularly scheduled cash dividends in amounts that are consistent with past practice), or any material adverse change, or any development that would reasonably be expected to result in a material adverse change, in or affecting the business, properties, management, financial position, stockholders' equity, results of operations or prospects of the Company and its subsidiaries taken as a whole; (ii) neither the Company nor any of its subsidiaries has entered into any transaction or agreement (whether or not in the ordinary course of business) that is material to the Company and its subsidiaries taken as a whole or incurred any liability or obligation, direct or contingent, that is material to the Company and its subsidiaries taken as a whole; and (iii) neither the Company nor any of its subsidiaries has sustained any loss or interference with its business that is material to the Company and its subsidiaries taken as a whole and that is either from fire, explosion, flood or other calamity, whether or not covered by insurance, or from any labor disturbance or dispute or any action, order or decree of any court or arbitrator or governmental or regulatory authority.
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All capitalized terms used herein and not otherwise defined shall have the respective meanings assigned to them in the Agreement.

[Signature Page Follows]

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Name: Andrew Cheng  
Title: President and Chief Executive Officer

---

Name: William White  
Title: Executive Vice President, Chief Financial Officer and Head of  
Corporate Development

AKERO THERAPEUTICS, INC.,

**Issuer**

**AND**

**[TRUSTEE],**

---

**Trustee**

**INDENTURE**

**Dated as of [●], 202[●]**

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**Senior Debt Securities**

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## INDENTURE

INDENTURE, dated as of [●], 202[●], among AKERO THERAPEUTICS, INC., a Delaware corporation (the “Company”), and [TRUSTEE] as trustee (the “Trustee”):

WHEREAS, for its lawful corporate purposes, the Company has duly authorized the execution and delivery of this Indenture to provide for the issuance of debt securities (hereinafter referred to as the “Securities”), in an unlimited aggregate principal amount to be issued from time to time in one or more series as in this Indenture provided, as registered Securities without coupons, to be authenticated by the certificate of the Trustee;

WHEREAS, to provide the terms and conditions upon which the Securities are to be authenticated, issued and delivered, the Company has duly authorized the execution of this Indenture; and

WHEREAS, all things necessary to make this Indenture a valid and binding agreement of the Company, in accordance with its terms, have been done.

NOW, THEREFORE, in consideration of the premises and the purchase of the Securities by the holders thereof, it is mutually covenanted and agreed as follows for the equal and ratable benefit of the holders of Securities:

### ARTICLE 1 DEFINITIONS

#### Section 1.01 Definitions of Terms.

The terms defined in this Section (except as in this Indenture or any indenture supplemental hereto otherwise expressly provided or unless the context otherwise requires) for all purposes of this Indenture and of any indenture supplemental hereto shall have the respective meanings specified in this Section and shall include the plural as well as the singular. All other terms used in this Indenture that are defined in the Trust Indenture Act of 1939, as amended, or that are by reference in such Act defined in the Securities Act of 1933, as amended (except as herein or any indenture supplemental hereto otherwise expressly provided or unless the context otherwise requires), shall have the meanings assigned to such terms in said Trust Indenture Act and in said Securities Act as in force at the date of the execution of this instrument.

“**Authenticating Agent**” means an authenticating agent with respect to all or any of the series of Securities appointed by the Trustee pursuant to Section 2.10.

“**Bankruptcy Law**” means Title 11, U.S. Code, or any similar federal or state law for the relief of debtors.

“**Board of Directors**” means the Board of Directors (or the functional equivalent thereof) of the Company or any duly authorized committee of such Board.

“**Board Resolution**” means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification and delivered to the Trustee.

“**Business Day**” means, with respect to any series of Securities, any day other than a day on which federal or state banking institutions in the Borough of Manhattan, the City of New York, or at a place of payment, are authorized or obligated by law, executive order or regulation to close.

“**Commission**” means the Securities and Exchange Commission, as from time to time constituted, created under the Exchange Act, or, if at any time after the execution of this instrument such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties at such time.

“**Company**” means Akero Therapeutics, Inc., a corporation duly organized and existing under the laws of the State of Delaware, and, subject to the provisions of Article 10, shall also include its successors and assigns.

“**Company Order**” means a written order of the Company, signed by an Officer of the Company, and delivered to the Trustee.

“**Corporate Trust Office**” means the office of the Trustee at which, at any particular time, its corporate trust business shall be administered, which office at the date hereof is located at.

“**Custodian**” means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

“**Defaulted Interest**” has the meaning set forth in Section 2.03.

“**Depository**” means, with respect to Securities of any series for which the Company shall determine that such Securities will be issued as a Global Security, The Depository Trust Company, another clearing agency, or any successor registered as a clearing agency under the Exchange Act, or other applicable statute or regulation, which, in each case, shall be designated by the Company pursuant to either Section 2.01 or 2.11.

“**Event of Default**” means, with respect to Securities of a particular series, any event specified in Section 6.01, continued for the period of time, if any, therein designated.

“**Exchange Act**” means the United States Securities and Exchange Act of 1934, as amended, and the rules and regulations promulgated by the Commission thereunder.

“**Global Security**” means a Security issued to evidence all or a part of any series of Securities which is executed by the Company and authenticated and delivered by the Trustee to the Depository or pursuant to the Depository’s instruction, all in accordance with the Indenture, which shall be registered in the name of the Depository or its nominee.

“**Governmental Obligations**” means securities that are (a) direct obligations of the United States of America for the payment of which its full faith and credit is pledged or (b) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America, the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America that, in either case, are not callable or redeemable at the option of the issuer thereof at any time prior to the stated maturity of the applicable series of Securities, and shall also include a depository receipt issued by a bank or trust company as custodian with respect to any such Governmental Obligation or a specific payment of principal of or interest on any such Governmental Obligation held by such custodian for the account of the holder of such depository receipt; *provided, however*, that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the Governmental Obligation or the specific payment of principal of or interest on the Governmental Obligation evidenced by such depository receipt.

“**herein**”, “**hereof**” and “**hereunder**”, and other words of similar import, refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

“**Indenture**” means this instrument as originally executed or as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into in accordance with the terms hereof and shall include the terms of particular series of Securities established as contemplated by Section 2.01.

“**Interest Payment Date**”, when used with respect to any installment of interest on a Security of a particular series, means the date specified in such Security or in a Board Resolution or in an indenture supplemental hereto with respect to such series as the fixed date on which an installment of interest with respect to Securities of that series is due and payable.

“**Officer**” means, with respect to the Company, the Chairman of the Board of Directors, a Chief Executive Officer, a President, a Chief Financial Officer, a Chief Operating Officer, any Executive Vice President, any Senior Vice President, any Vice President, the Treasurer or any Assistant Treasurer, the Controller or any Assistant Controller or the Secretary or any Assistant Secretary.

“**Officer’s Certificate**” means a certificate signed by any Officer. Each such certificate shall include the statements provided for in Section 13.07, if and to the extent required by the provisions thereof.

“**Opinion of Counsel**” means an opinion in writing subject to customary exceptions of legal counsel, who may be an employee of or counsel for the Company, that is delivered to the Trustee in accordance with the terms hereof. Each such opinion shall include the statements provided for in Section 13.07, if and to the extent required by the provisions thereof.

“**Outstanding**”, when used with reference to Securities of any series, means, subject to the provisions of Section 8.04, as of any particular time, all Securities of that series theretofore authenticated and delivered by the Trustee under this Indenture, except (a) Securities theretofore canceled by the Trustee or any paying agent, or delivered to the Trustee or any paying agent for cancellation or that have previously been canceled; (b) Securities or portions thereof for the payment or redemption of which moneys or Governmental Obligations in the necessary amount shall have been deposited in trust with the Trustee or with any paying agent (other than the Company) or shall have been set aside and segregated in trust by the Company (if the Company shall act as its own paying agent); *provided, however*, that if such Securities or portions of such Securities are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as provided in Article 3, or provision satisfactory to the Trustee shall have been made for giving such notice; and (c) Securities in lieu of or in substitution for which other Securities shall have been authenticated and delivered pursuant to the terms of Section 2.07.

“**Person**” means any individual, corporation, partnership, joint venture, joint-stock company, limited liability company, association, trust, unincorporated organization, any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

“**Predecessor Security**” of any particular Security means every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security; and, for the purposes of this definition, any Security authenticated and delivered under Section 2.07 in lieu of a lost, destroyed or stolen Security shall be deemed to evidence the same debt as the lost, destroyed or stolen Security.

“**Responsible Officer**” when used with respect to the Trustee means any officer within the corporate trust department of the Trustee, including any vice president, assistant vice president, assistant secretary, assistant treasurer, trust officer or any other officer of the Trustee who customarily performs functions similar to those performed by the Persons who at the time shall be such officers, respectively, or to whom any corporate trust matter relating to this Indenture is referred because of such person’s knowledge of and familiarity with the particular subject and, in each case, who shall have direct responsibility for the administration of this Indenture (which, for the avoidance of doubt, includes without limitation any supplemental indenture hereto).

“**Securities**” has the meaning stated in the first recital of this Indenture and more particularly means any Securities authenticated and delivered under this Indenture.

“**Securityholder**”, “**holder**”, “**registered holder**”, or other similar term, means the Person or Persons in whose name or names a particular Security is registered on the Security Register kept for that purpose in accordance with the terms of this Indenture.

“**Security Register**” and “**Security Registrar**” shall have the meanings as set forth in Section 2.05.

“**Subsidiary**” means, with respect to any Person:

(1) any corporation or company a majority of whose capital stock with voting power, under ordinary circumstances, to elect directors is, at the date of determination, directly or indirectly, owned by such Person (a “**subsidiary**”), by one or more subsidiaries of such Person or by such Person and one or more subsidiaries of such Person;

(2) a partnership in which such Person or a subsidiary of such Person is, at the date of determination, a general partner of such partnership; or

(3) any partnership, limited liability company or other Person in which such Person, a subsidiary of such Person or such Person and one or more subsidiaries of such Person, directly or indirectly, at the date of determination, have (x) at least a majority ownership interest or (y) the power to elect or appoint or direct the election or appointment of the managing partner or member of such Person or, if applicable, a majority of the directors or other governing body of such Person.

“**Trustee**” means \_\_\_\_\_, and, subject to the provisions of Article 7, shall also include its successors and assigns, and, if at any time there is more than one Person acting in such capacity hereunder, “Trustee” shall mean each such Person. The term “Trustee” as used with respect to a particular series of the Securities shall mean the trustee with respect to that series.

“**Trust Indenture Act**” means the Trust Indenture Act of 1939, as amended and in effect from time to time.

“**U.S. dollar**” or “**\$**” means the lawful currency of the United States of America.

## **ARTICLE 2**

### **ISSUE, DESCRIPTION, TERMS, EXECUTION, REGISTRATION AND EXCHANGE OF SECURITIES**

#### Section 2.01 Designation and Terms of Securities.

(a) The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited. The Securities may be issued in one or more series up to the aggregate principal amount of Securities of that series from time to time authorized by or pursuant to a Board Resolution or pursuant to one or more indentures supplemental hereto. Prior to the initial issuance of Securities of any series, there shall be established in or pursuant to a Board Resolution, and set forth in an Officer’s Certificate or established in one or more indentures supplemental hereto:

- (1) the title of the Securities of the series (which shall distinguish the Securities of that series from all other Securities);

(2) any limit upon the aggregate principal amount of the Securities of that series which may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or in exchange for, or in lieu of, other Securities of that series);

(3) the date or dates on which the principal of the Securities of the series is payable;

(4) if the price (expressed as a percentage of the aggregate principal amount thereof) at which such 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 Securities that is convertible into another security or the method by which any such portion shall be determined;

(5) the rate or rates at which the Securities of the series shall bear interest or the manner of calculation of such rate or rates, if any;

(6) the date or dates from which such interest shall accrue, the Interest Payment Dates on which such interest will be payable or the manner of determination of such Interest Payment Dates, the place(s) of payment, and the record date for the determination of holders to whom interest is payable on any such Interest Payment Dates or the manner of determination of such record dates;

(7) the right, if any, to extend the interest payment periods and the duration of such extension;

(8) the period or periods within which, the price or prices at which and the terms and conditions upon which Securities of the series may be redeemed, converted or exchanged, in whole or in part;

(9) the obligation, if any, of the Company to redeem or purchase Securities of the series pursuant to any sinking fund, mandatory redemption, or analogous provisions (including payments made in cash in satisfaction of future sinking fund obligations) or at the option of a holder thereof and the period or periods within which, the price or prices at which, and the terms and conditions upon which, Securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

(10) the form of the Securities of the series including the form of the Certificate of Authentication for such series;

(11) if other than minimum denominations of one thousand U.S. dollars (\$1,000) or any integral multiple of \$1,000 thereof, the denominations in which the Securities of the series shall be issuable;

(12) any and all other terms (including terms, to the extent applicable, relating to any auction or remarketing of the Securities of that series and any security for the obligations of the Company with respect to such Securities) with respect to such series (which terms shall not be inconsistent with the terms of this Indenture, as amended by any supplemental indenture) including any terms which may be required by or advisable under United States laws or regulations or advisable in connection with the marketing of Securities of that series;

(13) whether the 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;

(14) whether the Securities will be convertible into or exchangeable for shares of common stock, preferred stock or other securities of the Company or any other Person and, if so, the terms and conditions upon which such 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 the Company's option or the holders' option) conversion or exchange features, and the applicable conversion or exchange period;

(15) if other than the full principal amount thereof, the portion of the principal amount of Securities of the series which shall be payable upon declaration of acceleration of the maturity thereof pursuant to Section 6.01;

(16) any additional or alternative Events of Default;



(17) additional or alternative covenants (which may include, among other restrictions, restrictions on the Company's ability or the ability of the Company's Subsidiaries to: incur additional indebtedness; issue additional securities; create liens; pay dividends or make distributions in respect of the capital stock of the Company or the Company's Subsidiaries; redeem capital stock; place restrictions on the Company's Subsidiaries' ability to pay dividends, make distributions or transfer assets; make investments or other restricted payments; sell or otherwise dispose of assets; enter into sale-leaseback transactions; engage in transactions with stockholders or affiliates; issue or sell stock of the Company's Subsidiaries; or effect a consolidation or merger) or financial covenants (which may include, among other financial covenants, financial covenants that require the Company and its Subsidiaries to maintain specified interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios) provided for with respect to the Securities of the series;

(18) the currency or currencies, including composite currencies, in which payment of the principal of (and premium, if any) and interest, if any, on such Securities shall be payable (if other than the currency of the United States of America), which unless otherwise specified shall be the currency of the United States of America as at the time of payment is legal tender for payment of public or private debts;

(19) if the principal of (and premium, if any) or interest, if any, on such Securities is to be payable, at the election of the Company or any holder thereof, in a coin or currency other than that in which such Securities are stated to be payable, then the period or periods within which, and the terms and conditions upon which, such election may be made;

(20) whether interest will be payable in cash or additional Securities at the Company's or the Securityholders' option and the terms and conditions upon which the election may be made;

(21) the terms and conditions, if any, upon which the Company shall pay amounts in addition to the stated interest, premium, if any and principal amounts of the Securities of the series to any Securityholder that is not a "United States person" for federal tax purposes;

(22) additional or alternative provisions, if any, related to defeasance and discharge of the offered Securities;

(23) the applicability of any guarantees;

(24) any restrictions on transfer, sale or assignment of the Securities of the series; and

(25) any other terms of the series.

All Securities of any one series shall be substantially identical except as may otherwise be provided in or pursuant to any such Board Resolution or in any indentures supplemental hereto.

If any of the terms of the series are established by action taken pursuant to a Board Resolution of the Company, a copy of an appropriate record of such action shall be certified by the secretary or an assistant secretary of the Company and delivered to the Trustee at or prior to the delivery of the Officer's Certificate of the Company setting forth the terms of the series.

Securities of any particular series may be issued at various times, with different dates on which the principal or any installment of principal is payable, with different rates of interest, if any, or different methods by which rates of interest may be determined, with different dates on which such interest may be payable and with different redemption dates.

#### Section 2.02 Form of Securities and Trustee's Certificate.

The Securities of any series and the Trustee's certificate of authentication to be borne by such Securities shall be substantially of the tenor and purport as set forth in one or more indentures supplemental hereto or as provided in a Board Resolution, and set forth in an Officer's Certificate, and they may have such letters, numbers or other marks of identification or designation and such legends or endorsements printed, lithographed or engraved thereon as the Company may deem appropriate and as are not inconsistent with the provisions of this Indenture, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any securities exchange on which Securities of that series may be listed, or to conform to usage.

Section 2.03 Denominations: Provisions for Payment.

The Securities shall be issuable as registered Securities and in the minimum denominations of one thousand U.S. dollars (\$1,000) or any integral multiple of \$1,000 thereof, subject to Section 2.01(a)(11). The Securities of a particular series shall bear interest payable on the dates and at the rate specified with respect to that series. Subject to Section 2.01(a)(18), the principal of and the interest on the Securities of any series, as well as any premium thereon in case of redemption thereof prior to maturity, shall be payable in the coin or currency of the United States of America that at the time is legal tender for public and private debt, at the office or agency of the Company maintained for that purpose. Each Security shall be dated the date of its authentication. Interest on the Securities shall be computed on the basis of a 360-day year composed of twelve 30-day months.

The interest installment on any Security that is payable, and is punctually paid or duly provided for, on any Interest Payment Date for Securities of that series shall be paid to the Person in whose name said Security (or one or more Predecessor Securities) is registered at the close of business on the regular record date for such interest installment. In the event that any Security of a particular series or portion thereof is called for redemption and the redemption date is subsequent to a regular record date with respect to any Interest Payment Date and prior to such Interest Payment Date, interest on such Security will be paid upon presentation and surrender of such Security as provided in Section 3.03.

Any interest on any Security that is payable, but is not punctually paid or duly provided for, on any Interest Payment Date for Securities of the same series (herein called “**Defaulted Interest**”) shall forthwith cease to be payable to the registered holder on the relevant regular record date by virtue of having been such holder; and such Defaulted Interest shall be paid by the Company, at its election, as provided in clause (1) or clause (2) below:

(1) The Company may elect to make payment of any Defaulted Interest on Securities to the Persons in whose names such Securities (or their respective Predecessor Securities) are registered at the close of business on a special record date for the payment of such Defaulted Interest, which shall be fixed in the following manner: the Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each such Security and the date of the proposed payment, and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Company shall fix a special record date for the payment of such Defaulted Interest which shall not be more than 15 nor less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Company shall promptly notify the Trustee in writing of such special record date and in such notice, instruct the Trustee to send such notice to holders, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the special record date therefor to be sent electronically or mailed, first class postage prepaid, to each Securityholder at his or her address as it appears in the Security Register (as hereinafter defined), not less than 10 days prior to such special record date. Notice of the proposed payment of such Defaulted Interest and the special record date therefor having been sent as aforesaid, such Defaulted Interest shall be paid to the Persons in whose names such Securities (or their respective Predecessor Securities) are registered on such special record date.

(2) The Company may make or cause to be made payment of any Defaulted Interest on any Securities in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

Unless otherwise set forth in a Board Resolution or one or more indentures supplemental hereto establishing the terms of any series of Securities pursuant to Section 2.01 hereof, the term “regular record date” as used in this Section with respect to a series of Securities and any Interest Payment Date for such series shall mean either (i) the fifteenth day of the month immediately preceding the month in which an Interest Payment Date established for such series pursuant to Section 2.01 hereof shall occur, if such Interest Payment Date is the first day of a month, or (ii) the first day of the month in which an Interest Payment Date established for such series pursuant to Section 2.01 hereof shall occur, if such Interest Payment Date is the fifteenth day of a month, whether or not such date is a Business Day.

Subject to the foregoing provisions of this Section, each Security of a series delivered under this Indenture upon transfer of or in exchange for or in lieu of any other Security of such series shall carry the rights to interest accrued and unpaid, and to accrue, that were carried by such other Security.

Section 2.04 Execution and Authentications.

The Securities shall be signed on behalf of the Company by one of its Officers. Signatures may be in the form of a manual or facsimile signature.

The Company may use the facsimile signature of any Person who shall have been an Officer, notwithstanding the fact that at the time the Securities shall be authenticated and delivered or disposed of such Person shall have ceased to be such an officer of the Company. The Securities may contain such notations, legends or endorsements required by law, stock exchange rule or usage. Each Security shall be dated the date of its authentication by the Trustee.

A Security shall not be valid until authenticated manually by an authorized signatory of the Trustee, or by an Authenticating Agent. Such signature shall be conclusive evidence that the Security so authenticated has been duly authenticated and delivered hereunder and that the holder is entitled to the benefits of this Indenture. At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities, signed by an Officer, and the Trustee in accordance with such Company Order shall authenticate and deliver such Securities.

In authenticating such Securities and accepting the additional responsibilities under this Indenture in relation to such Securities, the Trustee shall receive, and (subject to Section 7.01) shall be fully protected in conclusively relying upon, an Officer's Certificate and an Opinion of Counsel stating that the form and terms thereof have been established in conformity with the provisions of this Indenture, that all conditions precedent in connection with the issuance, authentication and delivery of such Securities have been met and that such Securities are legal, valid and binding obligations against the Company, enforceable against it in accordance with its terms, subject to customary exceptions and qualifications.

The Trustee shall not be required to authenticate such Securities if the issue of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties or immunities under the Securities and this Indenture or otherwise in a manner that is not reasonably acceptable to the Trustee.

Section 2.05 Registration of Transfer and Exchange.

(a) Securities of any series may be exchanged upon presentation thereof at the office or agency of the Company designated for such purpose, for other Securities of such series of authorized denominations, and for a like aggregate principal amount, upon payment of a sum sufficient to cover any tax or other governmental charge in relation thereto, all as provided in this Section. In respect of any Securities so surrendered for exchange, the Company shall execute, the Trustee shall authenticate and such office or agency shall deliver in exchange therefor the Security or Securities of the same series that the Securityholder making the exchange shall be entitled to receive, bearing numbers not contemporaneously outstanding.

(b) The Company shall keep, or cause to be kept, at its office or agency designated for such purpose a register or registers (herein referred to as the "**Security Register**") in which, subject to such reasonable regulations as it may prescribe, the Company shall register the Securities and the transfers of Securities as in this Article provided and which at all reasonable times shall be open for inspection by the Trustee. The registrar for the purpose of registering Securities and transfer of Securities as herein provided shall be appointed as authorized by Board Resolution (the "**Security Registrar**").

Upon surrender for transfer of any Security at the office or agency of the Company designated for such purpose, the Company shall execute, the Trustee shall authenticate and such office or agency shall deliver in the name of the transferee or transferees a new Security or Securities of the same series as the Security presented for a like aggregate principal amount.

All Securities presented or surrendered for exchange or registration of transfer, as provided in this Section, shall be accompanied (if so required by the Company or the Security Registrar) by a written instrument or instruments of transfer, in form satisfactory to the Company or the Security Registrar, duly executed by the registered holder or by such holder's duly authorized attorney in writing.

(c) Except as provided pursuant to Section 2.01 pursuant to a Board Resolution, and set forth in an Officer's Certificate, or established in one or more indentures supplemental to this Indenture, no service charge shall be made for any exchange or registration of transfer of Securities, or issue of new Securities in case of partial redemption of any series, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge in relation thereto, other than exchanges pursuant to Section 2.06, Section 3.03(b) and Section 9.04 not involving any transfer.

(d) The Company shall not be required (i) to issue, exchange or register the transfer of any Securities during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of less than all the Outstanding Securities of the same series and ending at the close of business on the day of such mailing, nor (ii) to register the transfer of or exchange any Securities of any series or portions thereof called for redemption, other than the unredeemed portion of any such Securities being redeemed in part. The provisions of this Section 2.05 are, with respect to any Global Security, subject to Section 2.11 hereof.

The Trustee shall have no obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Security (including any transfers between or among depository participants or beneficial owners of interests in any Global Security) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by the terms of, this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

Neither the Trustee nor any Agent shall have any responsibility or liability for any actions taken or not taken by the Depository.

#### Section 2.06 Temporary Securities.

Pending the preparation of definitive Securities of any series, the Company may execute, and the Trustee shall, upon receipt of a Company Order, authenticate and deliver, temporary Securities (printed, lithographed or typewritten) of any authorized denomination. Such temporary Securities shall be substantially in the form of the definitive Securities in lieu of which they are issued, but with such omissions, insertions and variations as may be appropriate for temporary Securities, all as may be determined by the Company. Every temporary Security of any series shall be executed by the Company and be authenticated by the Trustee upon the same conditions and in substantially the same manner, and with like effect, as the definitive Securities of such series. Without unnecessary delay the Company will execute and will furnish definitive Securities of such series and thereupon any or all temporary Securities of such series may be surrendered in exchange therefor (without charge to the holders), at the office or agency of the Company designated for the purpose, and the Trustee shall, upon receipt of a Company Order, authenticate and such office or agency shall deliver in exchange for such temporary Securities an equal aggregate principal amount of definitive Securities of such series, unless the Company advises the Trustee to the effect that definitive Securities need not be executed and furnished until further notice from the Company. Until so exchanged, the temporary Securities of such series shall be entitled to the same benefits under this Indenture as definitive Securities of such series authenticated and delivered hereunder.

Section 2.07 Mutilated, Destroyed, Lost or Stolen Securities.

In case any temporary or definitive Security shall become mutilated or be destroyed, lost or stolen, the Company (subject to the next succeeding sentence) shall execute, and upon receipt of a Company Order the Trustee (subject as aforesaid) shall authenticate and deliver, a new Security of the same series, bearing a number not contemporaneously outstanding, in exchange and substitution for the mutilated Security, or in lieu of and in substitution for the Security so destroyed, lost or stolen. In every case the applicant for a substituted Security shall furnish to the Company and the Trustee such security or indemnity as may be required by them to save each of them harmless, and, in every case of destruction, loss or theft, the applicant shall also furnish to the Company and the Trustee evidence to their satisfaction of the destruction, loss or theft of the applicant's Security and of the ownership thereof. The Trustee may authenticate any such substituted Security and deliver the same upon receipt of a Company Order. Upon the issuance of any substituted Security, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

In case any Security that has or is about to become due and payable, whether upon maturity of the Securities of a series or upon declaration or otherwise shall become mutilated or be destroyed, lost or stolen, the Company may, instead of issuing a substitute Security, pay or authorize the payment of the same (without surrender thereof except in the case of a mutilated Security) if the applicant for such payment shall furnish to the Company and the Trustee such security or indemnity as they may require to save them harmless, and, in case of destruction, loss or theft, evidence to the satisfaction of the Company and the Trustee of the destruction, loss or theft of such Security and of the ownership thereof.

Every replacement Security issued pursuant to the provisions of this Section shall constitute an additional contractual obligation of the Company whether or not the mutilated, destroyed, lost or stolen Security shall be found at any time, or be enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of the same series duly issued hereunder. All Securities shall be held and owned upon the express condition that the foregoing provisions are exclusive with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities, and shall preclude (to the extent lawful) any and all other rights or remedies, notwithstanding any law or statute existing or hereafter enacted to the contrary with respect to the replacement or payment of negotiable instruments or other securities without their surrender.

Section 2.08 Cancellation.

All Securities surrendered for the purpose of payment, redemption, exchange or registration of transfer shall, if surrendered to the Company or any paying agent, be delivered to the Trustee for cancellation, or, if surrendered to the Trustee, shall be cancelled by it, and no Securities shall be issued in lieu thereof except as expressly required or permitted by any of the provisions of this Indenture. On written request of the Company at the time of such surrender, the Trustee shall deliver to the Company evidence of cancellation for such canceled Securities held by the Trustee. The Trustee shall cancel and dispose of canceled Securities in accordance with its standard procedures and deliver a certificate of disposition to the Company. If the Company shall otherwise acquire any of the Securities, however, such acquisition shall not operate as a redemption or satisfaction of the indebtedness represented by such Securities unless and until the same are delivered to the Trustee for cancellation.

Section 2.09 Benefits of Indenture.

Nothing in this Indenture or in the Securities, express or implied, shall give or be construed to give to any Person, other than the parties hereto and the holders of the Securities any legal or equitable right, remedy or claim under or in respect of this Indenture, or under any covenant, condition or provision herein contained; all such covenants, conditions and provisions being for the sole benefit of the parties hereto and of the holders of the Securities.

Section 2.10 Authenticating Agent.

So long as any of the Securities of any series remain Outstanding there may be an Authenticating Agent for any or all such series of Securities which the Trustee shall have the right to appoint. Said Authenticating Agent shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon exchange, transfer or partial redemption thereof, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. All references in this Indenture to the authentication of Securities by the Trustee shall be deemed to include authentication by an Authenticating Agent for such series. Each Authenticating Agent shall be acceptable to the Company and shall be a corporation that has a combined capital and surplus, as most recently reported or determined by it, sufficient under the laws of any jurisdiction under which it is organized or in which it is doing business to conduct a trust business, and that is otherwise authorized under such laws to conduct such business and is subject to supervision or examination by federal or state authorities. If at any time any Authenticating Agent shall cease to be eligible in accordance with these provisions, it shall resign immediately.

Any Authenticating Agent may at any time resign by giving written notice of resignation to the Trustee and to the Company. The Trustee may at any time (and upon request by the Company shall) terminate the agency of any Authenticating Agent by giving written notice of termination to such Authenticating Agent and to the Company. Upon resignation, termination or cessation of eligibility of any Authenticating Agent, the Trustee may appoint an eligible successor Authenticating Agent acceptable to the Company. Any successor Authenticating Agent, upon acceptance of its appointment hereunder, shall become vested with all the rights, powers and duties of its predecessor hereunder as if originally named as an Authenticating Agent pursuant hereto.

Section 2.11 Global Securities.

(a) If the Company shall establish pursuant to Section 2.01 that the Securities of a particular series are to be issued as a Global Security, then the Company shall execute and the Trustee shall, in accordance with Section 2.04, authenticate and deliver, a Global Security that (i) shall represent, and shall be denominated in an amount equal to the aggregate principal amount of, all of the Outstanding Securities of such series, (ii) shall be registered in the name of the Depository or its nominee, (iii) shall be delivered by the Trustee to the Depository or held by it, pursuant to the Depository's instruction and (iv) shall bear a legend substantially to the following effect: "Except as otherwise provided in Section 2.11 of the Indenture, this Security may be transferred, in whole but not in part, only to another nominee of the Depository or to a successor Depository or to a nominee of such successor Depository."

(b) Notwithstanding the provisions of Section 2.05, the Global Security of a series may be transferred, in whole but not in part and in the manner provided in Section 2.05, only to another nominee of the Depository for such series, or to a successor Depository for such series selected or approved by the Company or to a nominee of such successor Depository.

(c) If at any time the Depository for a series of the Securities notifies the Company that it is unwilling or unable to continue as Depository for such series or if at any time the Depository for such series shall no longer be registered or in good standing under the Exchange Act, or other applicable statute or regulation, and a successor Depository for such series is not appointed by the Company within 90 days after the Company receives such notice or becomes aware of such condition, as the case may be, or if an Event of Default has occurred and is continuing and the Company has received a request from the Depository or from the Trustee, this Section 2.11 shall no longer be applicable to the Securities of such series and the Company will execute, and subject to Section 2.04, the Trustee will authenticate and deliver the Securities of such series in definitive registered form without coupons, in authorized denominations, and in an aggregate principal amount equal to the principal amount of the Global Security of such series in exchange for such Global Security. In addition, the Company may at any time determine that the Securities of any series shall no longer be represented by a Global Security and that the provisions of this Section 2.11 shall no longer apply to the Securities of such series. In such event the Company will execute and, subject to Section 2.04, the Trustee, upon receipt of an Officer's Certificate and a Company Order evidencing such determination by the Company, will authenticate and deliver the Securities of such series in definitive registered form without coupons, in authorized denominations, and in an aggregate principal amount equal to the principal amount of the Global Security of such series in exchange for such Global Security. Upon the exchange of the Global Security for such Securities in definitive registered form without coupons, in authorized denominations, the Global Security shall be canceled by the Trustee. Such Securities in definitive registered form issued in exchange for the Global Security pursuant to this Section 2.11(c) shall be registered in such names and in such authorized denominations as the Depository, pursuant to instructions from its direct or indirect participants or otherwise, shall instruct the Trustee in writing. The Trustee shall deliver such Securities to the Depository for delivery to the Persons in whose names such Securities are so registered.

**ARTICLE 3**  
**REDEMPTION OF SECURITIES AND SINKING FUND PROVISIONS**

Section 3.01 Redemption.

The Company may redeem the Securities of any series issued hereunder on and after the dates and in accordance with the terms established for such series pursuant to Section 2.01 hereof.

Section 3.02 Notice of Redemption.

(a) In case the Company shall desire to exercise such right to redeem all or, as the case may be, a portion of the Securities of any series in accordance with any right the Company reserved for itself to do so pursuant to Section 2.01 hereof, the Company shall, or shall cause the Trustee (upon 5 Business Days written notice, unless a shorter period shall be satisfactory to the Trustee) to, give notice of such redemption to holders of the Securities of such series to be redeemed by mailing, electronically or by first class postage prepaid mail, a notice of such redemption not less than 15 days and not more than 90 days, except that redemption notices may be sent more than 90 days prior to the redemption date if the notice is issued in connection with a defeasance of the Securities or a satisfaction and discharge, before the date fixed for redemption of that series to such holders (with a copy to the Trustee) at their last addresses as they shall appear upon the Security Register, unless a shorter period is specified in the Securities to be redeemed. Any notice that is mailed in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the registered holder receives the notice. In any case, failure duly to give such notice to the holder of any Security of any series designated for redemption in whole or in part, or any defect in the notice, shall not affect the validity of the proceedings for the redemption of any other Securities of such series or any other series. In the case of any redemption of Securities prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officer's Certificate evidencing compliance with any such restriction.

Each such notice of redemption shall specify the date fixed for redemption, if applicable, any record date with respect to such redemption and the redemption price at which Securities of that series are to be redeemed, and shall state that payment of the redemption price of such Securities to be redeemed will be made at the office or agency of the Company, upon presentation and surrender of such Securities, that interest accrued to the date fixed for redemption will be paid as specified in said notice, that from and after said date interest will cease to accrue and that the redemption is from a sinking fund, if such is the case. If less than all the Securities of a series are to be redeemed, the notice to the holders of Securities of that series to be redeemed in part shall specify the particular Securities to be so redeemed.

In case any Security is to be redeemed in part only, the notice that relates to such Security shall state the portion of the principal amount thereof to be redeemed, and shall state that on and after the redemption date, upon surrender of such Security, a new Security or Securities of such series in principal amount equal to the unredeemed portion thereof will be issued.

(b) If less than all the Securities of a series are to be redeemed, the Company shall give the Trustee at least 20 days' notice (unless a shorter notice shall be satisfactory to the Trustee) in advance of the date fixed for redemption as to the aggregate principal amount of Securities of the series to be redeemed, and thereupon the Trustee shall select, by lot or in such other manner as it shall deem appropriate and fair in its discretion (and subject to the applicable procedures of the Depository) and that may provide for the selection of a portion or portions (equal to one thousand U.S. dollars (\$1,000) or any integral multiple thereof) of the principal amount of such Securities of a denomination larger than \$1,000, the Securities to be redeemed and shall thereafter promptly notify the Company in writing of the numbers of the Securities to be redeemed, in whole or in part. The Company may, if and whenever it shall so elect, by delivery of instructions signed on its behalf by an Officer, instruct the Trustee or any paying agent to call all or any part of the Securities of a particular series for redemption and to send notice of redemption in the manner set forth in this Section, such notice to be in the name and at the expense of the Company. In any case in which notice of redemption is to be sent by the Trustee or any such paying agent, the Company shall deliver or cause to be delivered to, or permit to remain with, the Trustee or such paying agent, as the case may be, such Security Register, transfer books or other records, or suitable copies or extracts therefrom, sufficient to enable the Trustee or such paying agent to give any notice by mail that may be required under the provisions of this Section.

Section 3.03 Payment Upon Redemption.

(a) If the giving of notice of redemption shall have been completed as above provided, the Securities or portions of Securities of the series to be redeemed specified in such notice shall become due and payable on the date and at the place stated in such notice at the applicable redemption price, together with interest accrued to the date fixed for redemption and interest on such Securities or portions of Securities shall cease to accrue on and after the date fixed for redemption, unless the Company shall default in the payment of such redemption price and accrued interest with respect to any such Security or portion thereof. On presentation and surrender of such Securities on or after the date fixed for redemption at the place of payment specified in the notice, said Securities shall be paid and redeemed at the applicable redemption price for such series, together with interest accrued thereon to the date fixed for redemption (but if the date fixed for redemption is an interest payment date, the interest installment payable on such date shall be payable to the registered holder at the close of business on the applicable record date pursuant to Section 2.03).

(b) Upon presentation of any physical Security of such series that is to be redeemed in part only, the Company shall execute and the Trustee shall authenticate and the office or agency where the Security is presented shall deliver to the holder thereof, at the expense of the Company, a new Security of the same series of authorized denominations in principal amount equal to the unredeemed portion of the Security so presented.

Section 3.04 Sinking Fund.

The provisions of Sections 3.04, 3.05 and 3.06 shall be applicable to any sinking fund for the retirement of Securities of a series, except as otherwise specified as contemplated by Section 2.01 for Securities of such series.

The minimum amount of any sinking fund payment provided for by the terms of Securities of any series is herein referred to as a “mandatory sinking fund payment,” and any payment in excess of such minimum amount provided for by the terms of Securities of any series is herein referred to as an “optional sinking fund payment”. If provided for by the terms of Securities of any series, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 3.05. Each sinking fund payment shall be applied to the redemption of Securities of any series as provided for by the terms of Securities of such series.

Section 3.05 Satisfaction of Sinking Fund Payments with Securities.

The Company (i) may deliver Outstanding Securities of a series and (ii) may apply as a credit Securities of a series that have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, in each case in satisfaction of all or any part of any sinking fund payment with respect to the Securities of such series required to be made pursuant to the terms of such Securities as provided for by the terms of such series, *provided* that such Securities have not been previously so credited. Such Securities shall be received and credited for such purpose by the Trustee at the redemption price specified in such Securities for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly.

Section 3.06 Redemption of Securities for Sinking Fund.

Not less than 45 days prior to each sinking fund payment date for any series of Securities (unless a shorter period shall be satisfactory to the Trustee), the Company will deliver to the Trustee an Officer’s Certificate specifying the amount of the next ensuing sinking fund payment for that series pursuant to the terms of the series, the portion thereof, if any, that is to be satisfied by delivering and crediting Securities of that series pursuant to Section 3.05 and the basis for such credit and will, together with such Officer’s Certificate, deliver to the Trustee any Securities to be so delivered. Not less than 30 days before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 3.02 and cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 3.02. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Section 3.03.



## ARTICLE 4 COVENANTS

### Section 4.01 Payment of Principal, Premium and Interest.

The Company will duly and punctually pay or cause to be paid the principal of (and premium, if any) and interest on the Securities of that series at the time and place and in the manner provided herein and established with respect to such Securities. Payments of principal on the physical Securities may be made at the time provided herein and established with respect to such Securities by U.S. dollar check drawn on and mailed to the address of the Securityholder entitled thereto as such address shall appear in the Security Register, or U.S. dollar wire transfer to, a U.S. dollar account if such Securityholder shall have furnished wire instructions to the Trustee no later than 15 days prior to the relevant payment date. Payments of interest on the Securities may be made at the time provided herein and established with respect to such Securities by U.S. dollar check mailed to the address of the Securityholder entitled thereto as such address shall appear in the Security Register, or U.S. dollar wire transfer to an account in the United States if such Securityholder shall have furnished wire instructions in writing to the Security Registrar and the Trustee no later than 15 days prior to the relevant payment date.

### Section 4.02 Maintenance of Office or Agency.

So long as any series of the Securities remain Outstanding, the Company agrees to maintain an office or agency with respect to each such series and at such other location or locations as may be designated as provided in this Section 4.02, where (i) Securities of that series may be presented for payment, (ii) Securities of that series may be presented as herein above authorized for registration of transfer and exchange, and (iii) notices in respect of the Securities of that series and this Indenture may be given or made, such designation to continue with respect to such office or agency until the Company shall, by written notice in an Officer's Certificate and delivered to the Trustee, designate some other office or agency for such purposes or any of them. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations and notices may be made at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as its agent to receive all such presentations and notices; provided, however, the Trustee shall not be considered an agent of the Company for service of process.

### Section 4.03 Paying Agents.

(a) If the Company shall appoint one or more paying agents for all or any series of the Securities, other than the Trustee, the Company will cause each such paying agent to execute and deliver to the Trustee an instrument in which such agent shall agree with the Trustee, subject to the provisions of this Section:

(1) that it will hold all sums held by it as such agent for the payment of the principal of (and premium, if any) or interest on the Securities of that series (whether such sums have been paid to it by the Company or by any other obligor of such Securities) in trust for the benefit of the Persons entitled thereto;

(2) that it will give the Trustee notice of any failure by the Company (or by any other obligor of such Securities) to make any payment of the principal of (and premium, if any) or interest on the Securities of that series when the same shall be due and payable;

(3) that it will, at any time during the continuance of any failure referred to in the preceding paragraph (a)(2) above, upon the written request of the Trustee, forthwith pay to the Trustee all sums so held in trust by such paying agent;

(4) that upon any receivership, insolvency, liquidation, bankruptcy, reorganization, readjustment, arrangement, composition or judicial proceedings affecting the Company, the Trustee will automatically be the Paying Agent; and

(5) that it will perform all other duties of paying agent as set forth in this Indenture.

(b) If the Company shall act as its own paying agent with respect to any series of the Securities, it will on or before each due date of the principal of (and premium, if any) or interest on Securities of that series, set aside, segregate and hold in trust for the benefit of the Persons entitled thereto a sum sufficient to pay such principal (and premium, if any) or interest so becoming due on Securities of that series until such sums shall be paid to such Persons or otherwise disposed of as herein provided and will promptly notify the Trustee of such action, or any failure (by it or any other obligor on such Securities) to take such action. Whenever the Company shall have one or more paying agents for any series of Securities, it will, prior to each due date of the principal of (and premium, if any) or interest on any Securities of that series, deposit with the paying agent a sum sufficient to pay the principal (and premium, if any) or interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium or interest, and (unless such paying agent is the Trustee) the Company will promptly notify the Trustee of this action or failure so to act.

(c) Notwithstanding anything in this Section to the contrary, (i) the agreement to hold sums in trust as provided in this Section is subject to the provisions of Section 11.05, and (ii) the Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or direct any paying agent to pay, to the Trustee all sums held in trust by the Company or such paying agent, such sums to be held by the Trustee upon the same terms and conditions as those upon which such sums were held by the Company or such paying agent; and, upon such payment by the Company or any paying agent to the Trustee, the Company or such paying agent shall be released from all further liability with respect to such money.

(d) The Company initially appoints the Trustee at its Corporate Trust Office as its paying agent with respect to the Securities.

Section 4.04 Appointment to Fill Vacancy in Office of Trustee.

The Company, whenever necessary to avoid or fill a vacancy in the office of Trustee, will appoint, in the manner provided in Section 7.10, a Trustee, so that there shall at all times be a Trustee hereunder.

Section 4.05 Compliance with Consolidation Provisions.

The Company will not, while any of the Securities remain Outstanding, consolidate with or merge into any other Person, in either case where the Company is not the survivor of such transaction, or sell or convey all or substantially all of its property to any other Person unless the provisions of Article 10 hereof are complied with.

**ARTICLE 5**  
**SECURITYHOLDERS' LISTS AND REPORTS BY THE COMPANY**  
**AND THE TRUSTEE**

Section 5.01 Company to Furnish Trustee Names and Addresses of Securityholders.

The Company will furnish or cause to be furnished to the Trustee (a) within 5 days after each regular record date (as defined in Section 2.03) a list, in such form as the Trustee may reasonably require, of the names and addresses of the holders of each series of Securities as of such regular record date, *provided* that the Company shall not be obligated to furnish or cause to be furnished such list at any time that the list shall not differ in any respect from the most recent list furnished to the Trustee by the Company and (b) at such other times as the Trustee may request in writing within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished; *provided, however*, that, in either case, no such list need be furnished for any series for which the Trustee shall be the Security Registrar.

Section 5.02 Preservation Of Information; Communications With Securityholders.

(a) The Trustee shall preserve, in as current a form as is reasonably practicable, all information as to the names and addresses of the holders of Securities contained in the most recent list furnished to it as provided in Section 5.01 and as to the names and addresses of holders of Securities received by the Trustee in its capacity as Security Registrar (if acting in such capacity).

(b) The Trustee may destroy any list furnished to it as provided in Section 5.01 upon receipt of a new list so furnished.

(c) Securityholders may communicate as provided in Section 312(b) of the Trust Indenture Act with other Securityholders with respect to their rights under this Indenture or under the Securities, and, in connection with any such communications, the Trustee shall satisfy its obligations under Section 312(b) of the Trust Indenture Act in accordance with the provisions of Section 312(b) of the Trust Indenture Act.

Section 5.03 Reports by the Company.

(a) The Company covenants and agrees to provide (which delivery may be via electronic mail) to the Trustee within 30 days, after the Company files the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the Commission may from time to time by rules and regulations prescribe) that the Company is required to file with the Commission pursuant to Section 13 or Section 15(d) of the Exchange Act; *provided, however*, the Company shall not be required to deliver to the Trustee any materials for which the Company has sought and received confidential treatment by the Commission; and *provided further*, that so long as such filings by the Company are available on the Commission's Electronic Data Gathering, Analysis and Retrieval System (EDGAR), or Interactive Data Electronic Applications (IDEA), or any successor system, such filings shall be deemed to have been filed with the Trustee for purposes hereof without any further action required by the Company; *provided* that an electronic link to such filing, together with an electronic notice of such filing have been sent to the Trustee it being understood that the Trustee shall have no responsibility to determine whether such filings have been made. For the avoidance of doubt, a failure by the Company to file annual reports, information and other reports with the Commission within the time period prescribed thereof by the Commission shall not be deemed a breach of this Section 5.03.

(b) Delivery of reports, information and documents to the Trustee under Section 5.03 is for informational purposes only and the information and the Trustee's receipt of the foregoing shall not constitute constructive notice of any information contained therein, or determinable from information contained therein including the Company's compliance with any of their covenants thereunder (as to which the Trustee is entitled to rely exclusively on an Officer's Certificate).

Section 5.04 Reports by the Trustee.

(a) If required by Section 313(a) of the Trust Indenture Act, the Trustee, within sixty (60) days after each May 15, commencing the calendar year after the year in which the first Securities are issued hereunder, shall transmit by mail, first class postage prepaid, to the Securityholders, as their names and addresses appear upon the Security Register, a brief report dated as of such May 15, which complies with Section 313(a) of the Trust Indenture Act.

(b) The Trustee shall comply with Section 313(b) and 313(c) of the Trust Indenture Act.

(c) A copy of each such report shall, at the time of such transmission to Securityholders, be filed by the Trustee with the Company, with each securities exchange upon which any Securities are listed (if so listed) and also with the Commission. The Company agrees to notify the Trustee in writing when any Securities become listed on any securities exchange or of any delisting thereof.

**ARTICLE 6**  
**REMEDIES OF THE TRUSTEE AND SECURITYHOLDERS ON**  
**EVENT OF DEFAULT**

Section 6.01 Events of Default.

(a) Whenever used herein with respect to Securities of a particular series, "**Event of Default**" means any one or more of the following events that has occurred and is continuing:

(1) the Company defaults in the payment of any installment of interest upon any of the Securities of that series, 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 the Company in accordance with the terms of any indenture supplemental hereto shall not constitute a default in the payment of interest for this purpose;

(2) the Company defaults in the payment of the principal of (or premium, if any, on) any of the Securities of that series 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 that series; *provided, however*, that a valid extension of the maturity of such Securities in accordance with the terms of any indenture supplemental hereto shall not constitute a default in the payment of principal or premium, if any;

(3) the Company fails to observe or perform any other of its covenants or agreements with respect to that series contained in this Indenture or otherwise established with respect to that series of Securities pursuant to Section 2.01 hereof (other than a covenant or agreement that has been expressly included in this Indenture solely for the benefit of one or more series of Securities other than such series) for a period of 90 days after the date on which written notice of such failure, requiring the same to be remedied and stating that such notice is a “**Notice of Default**” hereunder, shall have been given to the Company by the Trustee or to the Company and the Trustee by the holders of at least 25% in principal amount of the Securities of that series at the time Outstanding;

(4) the Company pursuant to or within the meaning of any Bankruptcy Law (i) commences a voluntary case, (ii) consents to the entry of an order for relief against it in an involuntary case, (iii) consents to the appointment of a Custodian of it or for all or substantially all of its property or (iv) makes a general assignment for the benefit of its creditors; or

(5) a court of competent jurisdiction enters an order under any Bankruptcy Law that (i) is for relief against the Company in an involuntary case, (ii) appoints a Custodian of the Company for all or substantially all of its property or (iii) orders the liquidation of the Company, and the order or decree remains unstayed and in effect for 90 days.

(b) In each and every such case (other than an Event of Default specified in clause (4) or clause (5) above), unless the principal of all the Securities of that series shall have already become due and payable, either the Trustee or the holders of not less than 25% in aggregate principal amount of the Securities of that series then Outstanding hereunder, by notice in writing to the Company (and to the Trustee if given by such Securityholders), may declare the principal of (and premium, if any, on) and accrued and unpaid interest on all the Securities of that series to be due and payable immediately, and upon any such declaration the same shall become and shall be immediately due and payable. If an Event of Default specified in clause (4) or clause (5) above occurs, the principal of and accrued and unpaid interest on all the Securities of that series shall automatically be immediately due and payable without any declaration or other act on the part of the Trustee or the holders of the Securities.

(c) At any time after the principal of (and premium, if any, on) and accrued and unpaid interest on the Securities of that series shall have been so declared due and payable, and before any judgment or decree for the payment of the moneys due shall have been obtained or entered as hereinafter provided, the holders of a majority in aggregate principal amount of the Securities of that series then Outstanding hereunder, by written notice to the Company and the Trustee, may rescind and annul such declaration and its consequences if: (i) the Company has paid or deposited with the Trustee a sum sufficient to pay all matured installments of interest upon all the Securities of that series and the principal of (and premium, if any, on) any and all Securities of that series that shall have become due otherwise than by acceleration (with interest upon such principal and premium, if any, and, to the extent that such payment is enforceable under applicable law, upon overdue installments of interest, at the rate per annum expressed in the Securities of that series to the date of such payment or deposit) and the amount payable to the Trustee under Section 7.06, and (ii) any and all Events of Default under the Indenture with respect to such series, other than the nonpayment of principal on (and premium, if any, on) and accrued and unpaid interest on Securities of that series that shall not have become due by their terms, shall have been remedied or waived as provided in Section 6.06.

No such rescission and annulment shall extend to or shall affect any subsequent default or impair any right consequent thereon.

(d) In case the Trustee shall have proceeded to enforce any right with respect to Securities of that series under this Indenture and such proceedings shall have been discontinued or abandoned because of such rescission or annulment or for any other reason or shall have been determined adversely to the Trustee, then and in every such case, subject to any determination in such proceedings, the Company and the Trustee shall be restored respectively to their former positions and rights hereunder, and all rights, remedies and powers of the Company and the Trustee shall continue as though no such proceedings had been taken.

Section 6.02 Collection of Indebtedness and Suits for Enforcement by Trustee.

(a) The Company covenants that if an Event of Default described in Section 6.01(a) or 6.01(b) shall have occurred with respect to the Securities of any series, the Company will pay to the Trustee, for the benefit of the holders of the Securities of that series, the whole amount that then shall have become due and payable on all such Securities for principal (and premium, if any) or interest, or both, as the case may be, with interest upon the overdue principal (and premium, if any) and (to the extent that payment of such interest is enforceable under applicable law) upon overdue installments of interest at the rate per annum expressed in the Securities of that series; and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, and the amount payable to the Trustee under Section 7.06.

(b) If the Company shall fail to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, shall be entitled and empowered to institute any action or proceedings at law or in equity for the collection of the sums so due and unpaid, and may prosecute any such action or proceeding to judgment or final decree, and may enforce any such judgment or final decree against the Company or other obligor upon the Securities of that series and collect the moneys adjudged or decreed to be payable in the manner provided by law or equity out of the property of the Company or other obligor upon the Securities of that series, wherever situated.

(c) In case of any receivership, insolvency, liquidation, bankruptcy, reorganization, readjustment, arrangement, composition or judicial proceedings affecting the Company, or its creditors or property, irrespective of whether the Trustee shall have made any demand pursuant to this Section 6.02, the Trustee shall have power to intervene in such proceedings and take any action therein that may be permitted by the court and shall (except as may be otherwise provided by law) be entitled to file such proofs of claim and other papers and documents as may be necessary or advisable in order to have the claims of the Trustee and of the holders of Securities of such series allowed for the entire amount due and payable by the Company under the Indenture at the date of institution of such proceedings and for any additional amount that may become due and payable by the Company after such date, and to collect and receive any moneys or other property payable or deliverable on any such claim, and to distribute the same after the deduction of the amount payable to the Trustee under Section 7.06; and any receiver, assignee or trustee in bankruptcy or reorganization is hereby authorized by each of the holders of Securities of such series to make such payments to the Trustee, and, in the event that the Trustee shall consent to the making of such payments directly to such Securityholders, to pay to the Trustee any amount due it under Section 7.06.

(d) All rights of action and of asserting claims under this Indenture, or under any of the terms established with respect to Securities of that series, may be enforced by the Trustee without the possession of any of such Securities, or the production thereof at any trial or other proceeding relative thereto, and any such suit or proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for payment to the Trustee of any amounts due under Section 7.06, be for the ratable benefit of the holders of the Securities of such series.

In case of an Event of Default hereunder, the Trustee may in its discretion proceed to protect and enforce the rights vested in it by this Indenture by such appropriate judicial proceedings as the Trustee shall deem most effectual to protect and enforce any of such rights, either at law or in equity or in bankruptcy or otherwise, whether for the specific enforcement of any covenant or agreement contained in the Indenture or in aid of the exercise of any power granted in this Indenture, or to enforce any other legal or equitable right vested in the Trustee by this Indenture or by law.

Nothing contained herein shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Securityholder any plan of reorganization, arrangement, adjustment or composition affecting the Securities of that series or the rights of any holder thereof or to authorize the Trustee to vote in respect of the claim of any Securityholder in any such proceeding.

Section 6.03 Application of Moneys Collected.

Any moneys or properties collected by the Trustee pursuant to this Article with respect to a particular series of Securities shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such moneys on account of principal (or premium, if any) or interest, upon presentation of the Securities of that series, and notation thereon of the payment, if only partially paid, and upon surrender thereof if fully paid:

**FIRST:** To the payment of reasonable costs and expenses of collection and of all amounts payable to the Trustee, its agents and attorneys under this Indenture;

**SECOND:** To the payment of the amounts then due and unpaid upon Securities of such series for principal (and premium, if any) and interest, in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the amounts due and payable on such Securities for principal (and premium, if any) and interest, respectively; and

**THIRD:** To the payment of the remainder, if any, to the Company or any other Person lawfully entitled thereto.

Section 6.04 Limitation on Suits.

No holder of any Security of any series shall have any right by virtue or by availing of any provision of this Indenture to institute any suit, action or proceeding in equity or at law upon or under or with respect to this Indenture or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless (i) such holder previously shall have given to the Trustee written notice of an Event of Default and of the continuance thereof with respect to the Securities of such series specifying such Event of Default, as hereinbefore provided; (ii) the holders of not less than 25% in aggregate principal amount of the Securities of such series then Outstanding shall have made written request upon the Trustee to institute such action, suit or proceeding in its own name as Trustee hereunder; (iii) such holder or holders shall have offered to the Trustee such indemnity reasonably satisfactory to it as it may require against the costs, expenses, claims and liabilities to be incurred therein or thereby; (iv) the Trustee for 90 days after its receipt of such notice, request and offer of indemnity, shall have failed to institute any such action, suit or proceeding and (v) during such 90 day period, the holders of a majority in principal amount of the Securities of that series do not give the Trustee a direction inconsistent with the request.

Notwithstanding anything contained herein to the contrary or any other provisions of this Indenture, the right of any holder of any Security to receive payment of the principal of (and premium, if any) and interest on such Security, as therein provided, on or after the respective due dates expressed in such Security (or in the case of redemption, on the redemption date), or to institute suit for the enforcement of any such payment on or after such respective dates or redemption date, shall not be impaired or affected without the consent of such holder and by accepting a Security hereunder it is expressly understood, intended and covenanted by the taker and holder of every Security of such series with every other such taker and holder and the Trustee, that no one or more holders of Securities of such series shall have any right in any manner whatsoever by virtue or by availing of any provision of this Indenture to affect, disturb or prejudice the rights of the holders of any other of such Securities, or to obtain or seek to obtain priority over or preference to any other such holder, or to enforce any right under this Indenture (it being understood that the Trustee does not have an affirmative duty to ascertain whether or not such actions or forbearances are unduly prejudicial to such holders), except in the manner herein provided and for the equal, ratable and common benefit of all holders of Securities of such series. For the protection and enforcement of the provisions of this Section, each and every Securityholder and the Trustee shall be entitled to such relief as can be given either at law or in equity.

Section 6.05 Rights and Remedies Cumulative; Delay or Omission Not Waiver.

(a) Except as otherwise provided in Section 2.07, all powers and remedies given by this Article to the Trustee or to the Securityholders shall, to the extent permitted by law, be deemed cumulative and not exclusive of any other powers and remedies available to the Trustee or the holders of the Securities, by judicial proceedings or otherwise, to enforce the performance or observance of the covenants and agreements contained in this Indenture or otherwise established with respect to such Securities.

(b) No delay or omission of the Trustee or of any holder of any of the Securities to exercise any right or power accruing upon any Event of Default occurring and continuing as aforesaid shall impair any such right or power, or shall be construed to be a waiver of any such default or an acquiescence therein; and, subject to the provisions of Section 6.04, every power and remedy given by this Article or by law to the Trustee or the Securityholders may be exercised from time to time, and as often as shall be deemed expedient, by the Trustee or by the Securityholders.

Section 6.06 Control by Securityholders.

The holders of a majority in aggregate principal amount of the Securities of any series at the time Outstanding, determined in accordance with Section 8.04, shall 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 such series; *provided, however*, that such direction shall not be in conflict with any rule of law or with this Indenture or subject the Trustee in its sole discretion to personal liability. The Trustee shall have the right to decline to follow any such direction if the Trustee in good faith shall determine that the proceeding so directed, subject to the Trustee's duties under the Trust Indenture Act, would involve the Trustee in personal liability or might be unduly prejudicial to the Securityholders not involved in the proceeding. Prior to taking any action under this Indenture, the Trustee shall be entitled to indemnity or security satisfactory to it against loss, liability or expense that may be caused by taking such action. The holders of a majority in aggregate principal amount of the Securities of any series at the time Outstanding affected thereby, determined in accordance with Section 8.04, may on behalf of the holders of all of the Securities of such series waive any past default in the performance of any of the covenants contained herein or established pursuant to Section 2.01 with respect to such series and its consequences, except a default in the payment of the principal of, or premium, if any, or interest on, any of the Securities of that series as and when the same shall become due by the terms of such Securities otherwise than by acceleration (unless such default has been cured and a sum sufficient to pay all matured installments of interest and principal and any premium has been deposited with the Trustee (in accordance with Section 6.01(c)). Upon any such waiver, the default covered thereby shall be deemed to be cured for all purposes of this Indenture and the Company, the Trustee and the holders of the Securities of such series shall be restored to their former positions and rights hereunder, respectively; but no such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

Section 6.07 Undertaking to Pay Costs.

All parties to this Indenture agree, and each holder of any Securities by such holder's acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Trustee, to any suit instituted by any Securityholder, or group of Securityholders, holding more than 10% in aggregate principal amount of the Outstanding Securities of any series, or to any suit instituted by any Securityholder for the enforcement of the payment of the principal of (or premium, if any) or interest on any Security of such series, on or after the respective due dates expressed in such Security or established pursuant to this Indenture.

**ARTICLE 7  
CONCERNING THE TRUSTEE**

Section 7.01 Certain Duties and Responsibilities of Trustee.

(a) The Trustee, prior to the occurrence of an Event of Default with respect to the Securities of a series and after the curing of all Events of Default with respect to the Securities of that series that may have occurred, shall undertake to perform with respect to the Securities of such series such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants shall be read into this Indenture against the Trustee. In case an Event of Default with respect to the Securities of a series has occurred (that has not been cured or waived), the Trustee shall exercise with respect to Securities of that series such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.

(b) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(1) prior to the occurrence of an Event of Default with respect to the Securities of a series and after the curing or waiving of all such Events of Default with respect to that series that may have occurred:

(A) the duties and obligations of the Trustee shall with respect to the Securities of such series be determined solely by the express provisions of this Indenture, and the Trustee shall not be liable with respect to the Securities of such series except for the performance of such duties and obligations as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(B) in the absence of willful misconduct on the part of the Trustee, the Trustee may with respect to the Securities of such series conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions that by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture (but need not confirm or investigate the accuracy of mathematical calculations or other facts stated therein);

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer or Responsible Officers of the Trustee, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(3) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the holders of not less than a majority in principal amount of the Securities of any series at the time Outstanding relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee under this Indenture with respect to the Securities of that series; and

(4) none of the provisions contained in this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur personal or financial liability in the performance of any of its duties or in the exercise of any of its rights or powers if there is reasonable ground for believing that the repayment of such funds or liability is not reasonably assured to it under the terms of this Indenture or adequate indemnity against such risk is not reasonably assured to it.

Section 7.02 Certain Rights of Trustee.

Except as otherwise provided in Section 7.01:

(a) The Trustee may rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, bond, security or other paper or document or other evidence of indebtedness believed by it to be genuine and to have been signed or presented by the proper party or parties. The Trustee need not investigate any fact or matter stated in the document. The Trustee shall receive and retain financial reports and statements of the Company to the extent provided herein, but shall have no duty to review or analyze such reports or statements to determine compliance with covenants or other obligations of the Company;



(b) Any request, direction, order or demand of the Company mentioned herein shall be sufficiently evidenced by a Board Resolution or an instrument signed in the name of the Company by any authorized Officer of the Company (unless other evidence in respect thereof is specifically prescribed herein);

(c) The Trustee may consult with counsel of its selection and the advice of such counsel or, if requested, any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken or suffered or omitted hereunder in good faith and in reliance thereon;

(d) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request, order or direction of any of the Securityholders pursuant to the provisions of this Indenture, unless such Securityholders shall have offered (and if requested, provided) to the Trustee security or indemnity satisfactory to it against the costs, expenses, claims and liabilities that may be incurred therein or thereby;

(e) The Trustee shall not be liable for any action taken or omitted to be taken by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture;

(f) The Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, bond, security, or other papers or documents or other evidence of indebtedness, unless requested in writing so to do by the holders of not less than a majority in principal amount of the Outstanding Securities of the particular series affected thereby (determined as provided in Section 8.04); *provided, however*, that if the payment within a reasonable time to the Trustee of the costs, expenses, claims or liabilities likely to be incurred by it in the making of such investigation is, in the opinion of the Trustee, not reasonably assured to the Trustee by the security afforded to it by the terms of this Indenture, the Trustee may require indemnity or security satisfactory to it against such costs, expenses, claims or liabilities as a condition to so proceeding. The reasonable expense of every such examination shall be paid by the Company or, if paid by the Trustee, shall be repaid by the Company upon demand;

(g) The Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder;

(h) In no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances;

(i) In no event shall the Trustee be responsible or liable for special, punitive, indirect, or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit) irrespective of whether the Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action;

(j) The permissive rights of the Trustee enumerated herein shall not be construed as duties;

(k) The Trustee may request that the Company deliver a certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture; and

(l) The Trustee shall not be required to give any bond or surety in respect of the performance of its powers and duties hereunder.

In addition, the Trustee shall not be deemed to have knowledge of any Default or Event of Default until a Responsible Officer of the Trustee shall have received written notification in the manner set forth in this Indenture, and such notice references the Securities and this Indenture or a Responsible Officer of the Trustee shall have obtained actual knowledge.

Section 7.03 Trustee Not Responsible for Recitals or Issuance of Securities.

(a) The recitals contained herein and in the Securities shall be taken as the statements of the Company, and the Trustee assumes no responsibility for the correctness of the same.

(b) The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities.

(c) The Trustee shall not be accountable for the use or application by the Company of any of the Securities or of the proceeds of such Securities, or for the use or application of any moneys paid over by the Trustee in accordance with any provision of this Indenture or established pursuant to Section 2.01, or for the use or application of any moneys received by any paying agent other than the Trustee.

Section 7.04 May Hold Securities.

The Trustee or any paying agent or Security Registrar, in its individual or any other capacity, may become the owner or pledgee of Securities with the same rights it would have if it were not Trustee, paying agent or Security Registrar.

Section 7.05 Moneys Held in Trust.

Subject to the provisions of Section 11.05, all moneys received by the Trustee shall, until used or applied as herein provided, be held in trust for the purposes for which they were received, but need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any moneys received by it hereunder except such as it may agree in writing with the Company to pay thereon.

Section 7.06 Compensation and Reimbursement.

(a) The Company covenants and agrees to pay to the Trustee, and the Trustee shall be entitled to, such compensation (which shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust) as the Company and the Trustee may from time to time agree in writing, for all services rendered by it in the execution of the trusts hereby created and in the exercise and performance of any of the powers and duties hereunder of the Trustee, and, except as otherwise expressly provided herein, the Company will pay or reimburse the Trustee upon its request for all reasonable and documented expenses, disbursements and advances incurred or made by the Trustee in accordance with any of the provisions of this Indenture (including the reasonable and documented fees and the expenses and disbursements of its counsel and of all Persons not regularly in its employ), except any such expense, disbursement or advance as may arise from its negligence or willful misconduct. The Company also covenants to indemnify the Trustee (and its officers, agents, directors and employees) for, and to hold it harmless against, any documented loss, liability or expense, including reasonable and documented attorneys' fees, incurred without negligence or willful misconduct on the part of the Trustee and arising out of or in connection with the acceptance or administration of this trust, including the reasonable and documented costs and expenses of defending itself against any claim of liability in the premises (whether asserted by the Company, or any holder or any other Person) or liability in connection with the exercise or performance of any of its powers or duties hereunder, or in connection with enforcing the provisions of this Section.

(b) The obligations of the Company under this Section to compensate and indemnify the Trustee and to pay or reimburse the Trustee for reasonable expenses, disbursements and advances shall constitute additional indebtedness hereunder. Such additional indebtedness shall be secured by a lien prior to that of the Securities upon all property and funds held or collected by the Trustee as such, except funds held in trust for the benefit of the holders of particular Securities.

(c) To ensure the Company's payment obligations in this Section, the Trustee shall have a lien prior to the Securities on all funds or property held or collected by the Trustee, except that held in trust to pay principal of, premium, if any, or interest on particular Securities. When the Trustee incurs expenses or renders services in connection with an Event of Default specified in Section 6.01(a)(4) or (5), the expenses (including the reasonable fees and expenses of its counsel) and the compensation for services in connection therewith are to constitute expenses of administration under any Bankruptcy Law. The provisions of this Section 7.06 shall survive the termination of this Indenture and the earlier resignation or removal of the Trustee.

Section 7.07 Reliance on Officer's Certificate or Opinion of Counsel.

Except as otherwise provided in Section 7.01, whenever in the administration of the provisions of this Indenture the Trustee shall deem it reasonably necessary or desirable that a matter be proved or established prior to taking or suffering or omitting to take any action hereunder, such matter (unless other evidence in respect thereof be herein specifically prescribed) may, in the absence of negligence or willful misconduct on the part of the Trustee, be deemed to be conclusively proved and established by an Officer's Certificate and Opinion of Counsel delivered to the Trustee and such certificate and opinion, in the absence of negligence or willful misconduct on the part of the Trustee, shall be full warrant to the Trustee for any action taken, suffered or omitted to be taken by it under the provisions of this Indenture upon the faith thereof.

Section 7.08 Disqualification; Conflicting Interests.

If the Trustee has or shall acquire any "conflicting interest" within the meaning of Section 310(b) of the Trust Indenture Act, the Trustee and the Company shall in all respects comply with the provisions of Section 310(b) of the Trust Indenture Act.

Section 7.09 Corporate Trustee Required; Eligibility.

There shall at all times be a Trustee with respect to the Securities issued hereunder which shall at all times be a corporation organized and doing business under the laws of the United States of America or any state or territory thereof or of the District of Columbia, or a corporation or other Person permitted to act as trustee by the Commission, authorized under such laws to exercise corporate trust powers, having a combined capital and surplus of at least fifty million U.S. dollars (\$50,000,000), and subject to supervision or examination by federal, state, territorial, or District of Columbia authority.

If such corporation or other Person publishes reports of condition at least annually, pursuant to law or to the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such corporation or other Person shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. The Company may not, nor may any Person directly or

indirectly controlling, controlled by, or under common control with the Company, serve as Trustee. In case at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section, the Trustee shall resign immediately in the manner and with the effect specified in Section 7.10.

Section 7.10 Resignation and Removal; Appointment of Successor.

(a) The Trustee or any successor hereafter appointed may at any time resign with respect to the Securities of one or more series by giving written notice thereof to the Company and by transmitting notice of resignation by electronic mail, or by first class postage prepaid mail, to the Securityholders of such series, as their names and addresses appear upon the Security Register. Upon receiving such notice of resignation, the Company shall promptly appoint a successor trustee with respect to Securities of such series by written instrument, in duplicate, executed by order of the Board of Directors, one copy of which instrument shall be delivered to the resigning Trustee and one copy to the successor trustee. If no successor trustee shall have been so appointed and have accepted appointment within 30 days after the mailing of such notice of resignation, the resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor trustee with respect to Securities of such series, or any Securityholder of that series who has been a bona fide holder of a Security or Securities for at least six months may on behalf of himself and all others similarly situated, petition any such court for the appointment of a successor trustee. Such court may thereupon after such notice, if any, as it may deem proper and prescribe, appoint a successor trustee.

(b) In case at any time any one of the following shall occur:

(i) the Trustee shall fail to comply with the provisions of Section 7.08 after written request therefor by the Company or by any Securityholder who has been a bona fide holder of a Security or Securities for at least six months; or

(ii) the Trustee shall cease to be eligible in accordance with the provisions of Section 7.09 and shall fail to resign after written request therefor by the Company or by any such Securityholder; or

(iii) the Trustee shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or commence a voluntary bankruptcy proceeding, or a receiver of the Trustee or of its property shall be appointed or consented to, or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation;

then, in any such case, the Company may remove the Trustee with respect to all Securities and appoint a successor trustee by written instrument, in duplicate, executed by order of the Board of Directors, one copy of which instrument shall be delivered to the Trustee so removed and one copy to the successor trustee, or any Securityholder who has been a bona fide holder of a Security or Securities for at least six months may, on behalf of that holder and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor trustee. Such court may thereupon after such notice, if any, as it may deem proper and prescribe, remove the Trustee and appoint a successor trustee.

(c) The holders of a majority in aggregate principal amount of the Securities of any series at the time Outstanding may at any time remove the Trustee with respect to such series by so notifying the Trustee and the Company and may appoint a successor Trustee for such series with the consent of the Company.

(d) Any resignation or removal of the Trustee and appointment of a successor trustee with respect to the Securities of a series pursuant to any of the provisions of this Section shall become effective upon acceptance of appointment by the successor trustee as provided in Section 7.11.

(e) Any successor trustee appointed pursuant to this Section may be appointed with respect to the Securities of one or more series or all of such series, and at any time there shall be only one Trustee with respect to the Securities of any particular series.

#### Section 7.11 Acceptance of Appointment By Successor.

(a) In case of the appointment hereunder of a successor trustee with respect to all Securities, every such successor trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on the request of the Company or the successor trustee, such retiring Trustee shall, upon full payment of any amount then due it pursuant to Section 7.06, execute and deliver an instrument transferring to such successor trustee all the rights, powers, and trusts of the retiring Trustee and shall duly assign, transfer and deliver to such successor trustee all property and money held by such retiring Trustee hereunder.

(b) In case of the appointment hereunder of a successor trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto wherein each successor trustee shall accept such appointment and which (i) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor trustee relates, (ii) shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (iii) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust, that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee and that no Trustee shall be responsible for any act or failure to act on the part of any other Trustee hereunder; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein, such retiring Trustee shall with respect to the Securities of that or those series to which the appointment of such successor trustee relates have no further responsibility for the exercise of rights and powers or for the performance of the duties and obligations vested in the Trustee under this Indenture, and each such successor trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor trustee relates; but, on request of the Company or any successor trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor trustee, to the extent contemplated by such supplemental indenture, the property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor trustee relates.

(c) Upon request of any such successor trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor trustee all such rights, powers and trusts referred to in paragraph (a) or (b) of this Section, as the case may be.

(d) No successor trustee shall accept its appointment unless at the time of such acceptance such successor trustee shall be qualified and eligible under this Article.

(e) Upon acceptance of appointment by a successor trustee as provided in this Section, the Company shall transmit notice of the succession of such trustee hereunder by mail, first class postage prepaid, to the Securityholders, as their names and addresses appear upon the Security Register. If the Company fails to transmit such notice within ten days after acceptance of appointment by the successor trustee, the successor trustee shall cause such notice to be transmitted at the expense of the Company.

Section 7.12 Merger, Conversion, Consolidation or Succession to Business.

Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to the corporate trust business of the Trustee, including the administration of the trust created by this Indenture, shall be the successor of the Trustee hereunder, *provided* that such corporation shall be qualified under the provisions of Section 7.08 and eligible under the provisions of Section 7.09, without the execution or filing of any paper or any further act on the part of any of the parties hereto, anything herein to the contrary notwithstanding. In case any Securities shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities.

Section 7.13 Preferential Collection of Claims Against the Company.

The Trustee shall comply with Section 311(a) of the Trust Indenture Act, excluding any creditor relationship described in Section 311(b) of the Trust Indenture Act. A Trustee who has resigned or been removed shall be subject to Section 311(a) of the Trust Indenture Act to the extent included therein.

Section 7.14 Notice of Default.

If any Event of Default occurs and is continuing and if such Event of Default is actually known to a Responsible Officer of the Trustee, the Trustee shall send to each Securityholder in the manner and to the extent provided in Section 313(c) of the Trust Indenture Act notice of the Event of Default within the later of 90 days after it occurs and 30 days after it is actually known to a Responsible Officer of the Trustee or written notice of it is received by the Trustee, unless such Event of Default has been cured; *provided, however*, that, except in the case of a default in the payment of the principal of (or premium, if any) or interest on any Security, the Trustee shall be protected in withholding such notice if and so long as it in good faith determines that the withholding of such notice is in the interest of the Securityholders.

**ARTICLE 8**  
**CONCERNING THE SECURITYHOLDERS**

Section 8.01 Evidence of Action by Securityholders.

Whenever in this Indenture it is *provided* that the holders of a majority or specified percentage in aggregate principal amount of the Securities of a particular series may take any action (including the making of any demand or request, the giving of any notice, consent or waiver or the taking of any other action), the fact that at the time of taking any such action the holders of such majority or specified percentage of that series have joined therein may be evidenced by any instrument or any number of instruments of similar tenor executed by such holders of Securities of that series in person or by agent or proxy appointed in writing.

If the Company shall solicit from the Securityholders of any series any request, demand, authorization, direction, notice, consent, waiver or other action, the Company may, at its option, as evidenced by an Officer's Certificate, fix in advance a record date for such series for the determination of Securityholders entitled to give such request, demand, authorization, direction, notice, consent, waiver or other action, but the Company shall have no obligation to do so. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, waiver or other action may be given before or after the record date, but only the Securityholders of record at the close of business on the record date shall be deemed to be Securityholders for the purposes of determining whether Securityholders of the requisite proportion of Outstanding Securities of that series have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, waiver or other action, and for that purpose the Outstanding Securities of that series shall be computed as of the record date; *provided, however*, that no such authorization, agreement or consent by such Securityholders on the record date shall be deemed effective unless it shall become effective pursuant to the provisions of this Indenture not later than six months after the record date.

Section 8.02 Proof of Execution by Securityholders.

Subject to the provisions of Section 7.01, proof of the execution of any instrument by a Securityholder (such proof will not require notarization) or his agent or proxy and proof of the holding by any Person of any of the Securities shall be sufficient if made in the following manner:

(a) The fact and date of the execution by any such Person of any instrument may be proved in any reasonable manner acceptable to the Trustee.

(b) The ownership of Securities shall be proved by the Security Register of such Securities or by a certificate of the Security Registrar thereof. The Trustee may require such additional proof of any matter referred to in this Section as it shall deem necessary.

Section 8.03 Who May be Deemed Owners.

Prior to the due presentment for registration of transfer of any Security, the Company, the Trustee, any paying agent and any Security Registrar may deem and treat the Person in whose name such Security shall be registered upon the books of the Security Registrar as the absolute owner of such Security (whether or not such Security shall be overdue and notwithstanding any notice of ownership or writing thereon made by anyone other than the Security Registrar) for the purpose of receiving payment of or on account of the principal of, premium, if any, and (subject to Section 2.03) interest on such Security and for all other purposes; and neither the Company nor the Trustee nor any paying agent nor any Security Registrar shall be affected by any notice to the contrary.

Section 8.04 Certain Securities Owned by Company Disregarded.

In determining whether the holders of the requisite aggregate principal amount of Securities of a particular series have concurred in any direction, consent, demand, authorization, notice or waiver under this Indenture, the Securities of that series that are owned by the Company or any other obligor on the Securities of that series or by any Person directly or indirectly controlling or controlled by or under common control with the Company or any other obligor on the Securities of that series shall be disregarded and deemed not to be Outstanding for the purpose of any such determination, except that for the purpose of determining whether the Trustee shall be protected in relying on any such direction, consent or waiver, only Securities of such series that a Responsible Officer of the Trustee actually knows are so owned shall be so disregarded. The Securities so owned that have been pledged in good faith may be regarded as Outstanding for the purposes of this Section, if the pledgee shall establish to the satisfaction of the Trustee the pledgee's right so to act with respect to such Securities and that the pledgee is not a Person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company or any such other obligor. In case of a dispute as to such right, any decision by the Trustee taken upon the advice of counsel shall be full protection to the Trustee.

Section 8.05 Actions Binding on Future Securityholders.

At any time prior to (but not after) the evidencing to the Trustee, as provided in Section 8.01, of the taking of any action by the holders of the majority or percentage in aggregate principal amount of the Securities of a particular series specified in this Indenture in connection with such action, any holder of a Security of that series that is shown by the evidence to be included in the Securities the holders of which have consented to such action may, by filing written notice with the Trustee, and upon proof of holding as provided in Section 8.02, revoke such action so far as concerns such Security. Except as aforesaid any such action taken by the holder of any Security shall be conclusive and binding upon such holder and upon all future holders and owners of such Security, and of any Security issued in exchange therefor, on registration of transfer thereof or in place thereof, irrespective of whether or not any notation in regard thereto is made upon such Security. Any action taken by the holders of the majority or percentage in aggregate principal amount of the Securities of a particular series specified in this Indenture in connection with such action shall be conclusively binding upon the Company, the Trustee and the holders of all the Securities of that series.

**ARTICLE 9**  
**SUPPLEMENTAL INDENTURES**

Section 9.01 Supplemental Indentures Without the Consent of Securityholders.

In addition to any supplemental indenture otherwise authorized by this Indenture, the Company and the Trustee may from time to time and at any time enter into an indenture or indentures supplemental hereto (which shall conform to the provisions of the Trust Indenture Act as then in effect), without the consent of the Securityholders at any time Outstanding, for one or more of the following purposes:

- (a) to cure any ambiguity, defect, or inconsistency herein or in the Securities of any series;
- (b) to comply with Article 10;
- (c) to provide for uncertificated Securities in addition to or in place of certificated Securities;

(d) to add to the covenants, restrictions, conditions or provisions relating to the Company for the benefit of the holders of all or any series of Securities (and if such covenants, restrictions, conditions or provisions are to be for the benefit of less than all series of Securities, stating that such covenants, restrictions, conditions or provisions are expressly being included solely for the benefit of such series), 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 herein conferred upon the Company;

(e) 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 Securities, as herein set forth;

- (f) to make any change that does not adversely affect the rights of any Securityholder in any material respect;

(g) to provide for the issuance of and establish the form and terms and conditions of the Securities of any series as provided in Section 2.01, to establish the form of any certifications required to be furnished pursuant to the terms of this Indenture or any series of Securities, or to add to the rights of the holders of any series of Securities;

(h) to evidence and provide for the acceptance of appointment hereunder by a successor trustee or to appoint a separate trustee with respect to any series; or

(i) to comply with any requirements of the Commission or any successor in connection with the qualification of this Indenture under the Trust Indenture Act.

The Trustee is hereby authorized to join with the Company in the execution of any such supplemental indenture, and to make any further appropriate agreements and stipulations that may be therein contained, but the Trustee shall not be obligated to enter into any such supplemental indenture that affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

Any supplemental indenture authorized by the provisions of this Section may be executed by the Company and the Trustee without the consent of the holders of any of the Securities at the time Outstanding, notwithstanding any of the provisions of Section 9.02.

#### Section 9.02 Supplemental Indentures With Consent of Securityholders.

With the consent (evidenced as provided in Section 8.01) of the holders of not less than a majority in aggregate principal amount of the Securities of each series affected by such supplemental indenture or indentures at the time Outstanding, the Company, when authorized by a Board Resolution, and the Trustee may from time to time and at any time enter into an indenture or indentures supplemental hereto (which shall conform to the provisions of the Trust Indenture Act as then in effect) for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of any supplemental indenture or of modifying in any manner not covered by Section 9.01 the rights of the holders of the Securities of such series under this Indenture; *provided, however*, that no such supplemental indenture shall, without the consent of the holders of each Security then Outstanding and affected thereby, (a) extend the fixed maturity of any Securities of any series, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce any premium payable upon the redemption thereof or (b) reduce the aforesaid percentage of Securities, the holders of which are required to consent to any such supplemental indenture.

It shall not be necessary for the consent of the Securityholders of any series affected thereby under this Section to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such consent shall approve the substance thereof. The Trustee shall not be obligated to enter into any such supplemental indenture that affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

#### Section 9.03 Effect of Supplemental Indentures.

Upon the execution of any supplemental indenture pursuant to the provisions of this Article or of Section 10.01, this Indenture shall, with respect to such series only, be and be deemed to be modified and amended in accordance therewith and the respective rights, limitations of rights, obligations, duties and immunities under this Indenture of the Trustee, the Company and the holders of Securities of the series affected thereby shall thereafter be determined, exercised and enforced hereunder subject in all respects to such modifications and amendments, and all the terms and conditions of any such supplemental indenture shall be and be deemed to be part of the terms and conditions of this Indenture for any and all purposes with respect to such series.

#### Section 9.04 Securities Affected by Supplemental Indentures.

Securities of any series affected by a supplemental indenture, authenticated and delivered after the execution of such supplemental indenture pursuant to the provisions of this Article or of Section 10.01, may bear a notation in form approved by the Company, provided such form meets the requirements of any securities exchange upon which such series may be listed, as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities of that series so modified as to conform, in the opinion of the Board of Directors, to any modification of this Indenture contained in any such supplemental indenture may be prepared by the Company, authenticated by the Trustee and delivered in exchange for the Securities of that series then Outstanding.



Section 9.05 Execution of Supplemental Indentures.

Upon the request of the Company, accompanied by its Board Resolutions authorizing the execution of any such supplemental indenture, and upon the filing with the Trustee of evidence of the consent of Securityholders required to consent thereto as aforesaid, the Trustee shall join with the Company in the execution of such supplemental indenture unless such supplemental indenture affects the Trustee's own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion but shall not be obligated to enter into such supplemental indenture. The Trustee shall receive an Officer's Certificate and an Opinion of Counsel as conclusive evidence that any supplemental indenture executed pursuant to this Article is authorized or permitted by the terms of this Article and that all conditions precedent to the execution of the supplemental indenture have been complied with and with respect to such Opinion of Counsel, that such supplemental indenture is the legal, valid and binding obligation of the Company, enforceable against each of them in accordance with its terms, subject to customary exceptions and qualifications.

Promptly after the execution by the Company and the Trustee of any supplemental indenture pursuant to the provisions of this Article, the Company shall transmit by electronic mail, or by first class mail, postage prepaid, a notice, setting forth in general terms the substance of such supplemental indenture, to the Securityholders of all series affected thereby as their names and addresses appear upon the Security Register. Any failure of the Company to mail, or cause the mailing of, such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture.

**ARTICLE 10**  
**SUCCESSOR ENTITY**

Section 10.01 Company May Consolidate, Etc.

Nothing contained in this Indenture shall prevent any consolidation or merger of the Company with or into any other Person (whether or not affiliated with the Company) or successive consolidations or mergers in which the Company or its successor or successors shall be a party or parties, or shall prevent any sale, conveyance, transfer or other disposition of the property of the Company or its successor or successors as an entirety, or substantially as an entirety, to any other corporation (whether or not affiliated with the Company or its successor or successors) authorized to acquire and operate the same; *provided, however,* (a) the Company hereby covenants and agrees that, upon any such consolidation or merger (in each case, if the Company is not the survivor of such transaction), sale, conveyance, transfer or other disposition, the due and punctual payment of the principal of (premium, if any) and interest on all of the Securities of all series in accordance with the terms of each series, according to their tenor, and the due and punctual performance and observance of all the covenants and conditions of this Indenture with respect to each series or established with respect to such series pursuant to Section 2.01 to be kept or performed by the Company shall be expressly assumed, by supplemental indenture (which shall conform to the provisions of the Trust Indenture Act, as then in effect) executed and delivered to the Trustee by the entity formed by such consolidation, or into which the Company shall have been merged, or by the entity which shall have acquired such property and (b) in the event that the Securities of any series then Outstanding are convertible into or exchangeable for shares of common stock or other securities of the Company, such entity shall, by such supplemental indenture, make provision so that the Securityholders of Securities of that series shall thereafter be entitled to receive upon conversion or exchange of such Securities the number of securities or property to which a holder of the number of shares of common stock or other securities of the Company deliverable upon conversion or exchange of those Securities would have been entitled had such conversion or exchange occurred immediately prior to such consolidation, merger, sale, conveyance, transfer or other disposition. If the Company is not the surviving entity of any such transaction, the Company or the continuing entity agrees to deliver to the Trustee an Officer's Certificate and Opinion of Counsel stating that the transaction and the supplemental indenture complies with this Section 10.01 and that all conditions precedent herein relating to the transaction have been satisfied.

Section 10.02 Successor Entity Substituted.

(a) In case of any such consolidation, merger, sale, conveyance, transfer or other disposition and upon the assumption by the successor entity by supplemental indenture, executed and delivered to the Trustee, of the obligations set forth under Section 10.01 on all of the Securities of all series Outstanding, such successor entity shall succeed to and be substituted for the Company with the same effect as if it had been named as the Company herein, and thereupon the predecessor corporation shall be relieved of all obligations and covenants under this Indenture and the Securities.

(b) In case of any such consolidation, merger, sale, conveyance, transfer or other disposition, such changes in phraseology and form (but not in substance) may be made in the Securities thereafter to be issued as may be appropriate.

(c) Nothing contained in this Article shall require any action by the Company in the case of a consolidation or merger of any Person into the Company where the Company is the survivor of such transaction, or the acquisition by the Company, by purchase or otherwise, of all or any part of the property of any other Person (whether or not affiliated with the Company).

**ARTICLE 11**  
**SATISFACTION AND DISCHARGE**

Section 11.01 Satisfaction and Discharge of Indenture.

If at any time: (a) the Company shall have delivered to the Trustee for cancellation all Securities of a series theretofore authenticated and not delivered to the Trustee for cancellation (other than any Securities that shall have been destroyed, lost or stolen and that shall have been replaced or paid as provided in Section 2.07 and Securities for whose payment money or Governmental Obligations have theretofore been deposited in trust or segregated and held in trust by the Company and thereupon repaid to the Company or discharged from such trust, as provided in Section 11.05); or (b) all such Securities of a particular series not theretofore delivered to the Trustee for cancellation shall have become due and payable, or are by their terms to become due and payable within one year or are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption, and the Company shall deposit or cause to be deposited with the Trustee as trust funds the entire amount in moneys or Governmental Obligations or a combination thereof, sufficient in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay at maturity or upon redemption all Securities of that series not theretofore delivered to the Trustee for cancellation, including principal (and premium, if any) and interest due or to become due to such date of maturity or date fixed for redemption, as the case may be, and if the Company shall also pay or cause to be paid all other sums payable hereunder with respect to such series by the Company then this Indenture shall thereupon cease to be of further effect with respect to such series except for the provisions of Sections 2.03, 2.05, 2.07, 4.01, 4.02, 4.03 and 7.10, that shall survive until the date of maturity or redemption date, as the case may be, and Sections 7.06 and 11.05, that shall survive to such date and thereafter, and the Trustee, on demand of the Company and at the cost and expense of the Company shall execute such instruments reasonably requested by the Company acknowledging satisfaction of and discharging this Indenture with respect to such series.

Section 11.02 Discharge of Obligations.

If at any time all such Securities of a particular series not heretofore delivered to the Trustee for cancellation or that have not become due and payable as described in Section 11.01 shall have been paid by the Company by depositing irrevocably with the Trustee as trust funds moneys or an amount of Governmental Obligations sufficient to pay at maturity or upon redemption all such Securities of that series not theretofore delivered to the Trustee for cancellation, including principal (and premium, if any) and interest due or to become due to such date of maturity or date fixed for redemption, as the case may be, and if the Company shall also pay or cause to be paid all other sums payable hereunder by the Company with respect to such series, then after the date such moneys or Governmental Obligations, as the case may be, are deposited with the Trustee the obligations of the Company under this Indenture with respect to such series shall cease to be of further effect except for the provisions of Sections 2.03, 2.05, 2.07, 4.01, 4.02, 4.03, 7.06, 7.10 and 11.05 hereof that shall survive until such Securities shall mature and be paid.

Thereafter, Sections 7.06 and 11.05 shall survive.

Section 11.03 Deposited Moneys to be Held in Trust.

All moneys or Governmental Obligations deposited with the Trustee pursuant to Sections 11.01 or 11.02 shall be held in trust and shall be available for payment as due, either directly or through any paying agent (including the Company acting as its own paying agent), to the holders of the particular series of Securities for the payment or redemption of which such moneys or Governmental Obligations have been deposited with the Trustee.

Section 11.04 Payment of Moneys Held by Paying Agents.

In connection with the satisfaction and discharge of this Indenture all moneys or Governmental Obligations then held by any paying agent under the provisions of this Indenture shall, upon demand of the Company, be paid to the Trustee and thereupon such paying agent shall be released from all further liability with respect to such moneys or Governmental Obligations.

Section 11.05 Repayment to Company.

Any moneys or Governmental Obligations deposited with any paying agent or the Trustee, or then held by the Company, in trust for payment of principal of or premium, if any, or interest on the Securities of a particular series that are not applied but remain unclaimed by the holders of such Securities for at least two years after the date upon which the principal of (and premium, if any) or interest on such Securities shall have respectively become due and payable, or such other shorter period set forth in applicable escheat or abandoned or unclaimed property law, shall be repaid to the Company on May 31 of each year or upon the Company's request or (if then held by the Company) shall be discharged from such trust; and thereupon the paying agent and the Trustee shall be released from all further liability with respect to such moneys or Governmental Obligations, and the holder of any of the Securities entitled to receive such payment shall thereafter, as a general creditor, look only to the Company for the payment thereof.

**ARTICLE 12**  
**IMMUNITY OF INCORPORATORS, STOCKHOLDERS, OFFICERS**  
**AND DIRECTORS**

Section 12.01 No Recourse.

No recourse under or upon any obligation, covenant or agreement of this Indenture, or of any Security, or for any claim based thereon or otherwise in respect thereof, shall be had against any incorporator, stockholder, officer or director, past, present or future as such, of the Company or of any predecessor or successor corporation, either directly or through the Company or any such predecessor or successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly understood that this Indenture and the obligations issued hereunder are solely corporate obligations, and that no such personal liability whatever shall attach to, or is or shall be incurred by, the incorporators, stockholders, officers or directors as such, of the Company or of any predecessor or successor corporation, or any of them, because of the creation of the indebtedness hereby authorized, or under or by reason of the obligations, covenants or agreements contained in this Indenture or in any of the Securities or implied therefrom; and that any and all such personal liability of every name and nature, either at common law or in equity or by constitution or statute, of, and any and all such rights and claims against, every such incorporator, stockholder, officer or director as such, because of the creation of the indebtedness hereby authorized, or under or by reason of the obligations, covenants or agreements contained in this Indenture or in any of the Securities or implied therefrom, are hereby expressly waived and released as a condition of, and as a consideration for, the execution of this Indenture and the issuance of such Securities.

**ARTICLE 13**  
**MISCELLANEOUS PROVISIONS**

Section 13.01 Effect on Successors and Assigns.

All the covenants, stipulations, promises and agreements in this Indenture made by or on behalf of the Company shall bind its successors and assigns, whether so expressed or not.

Section 13.02 Actions by Successor.

Any act or proceeding by any provision of this Indenture authorized or required to be done or performed by any board, committee or officer of the Company shall and may be done and performed with like force and effect by the corresponding board, committee or officer of any corporation that shall at the time be the lawful successor of the Company.

Section 13.03 Surrender of Company Powers.

The Company by instrument in writing executed by authority of its Board of Directors and delivered to the Trustee may surrender any of the powers reserved to the Company, and thereupon such power so surrendered shall terminate both as to the Company and as to any successor corporation.

Section 13.04 Notices.

Except as otherwise expressly provided herein, any notice, request or demand that by any provision of this Indenture is required or permitted to be given, made or served by the Trustee or by the holders of Securities or by any other Person pursuant to this Indenture to or on the Company may be given or served by any standard form of telecommunication or by being deposited in first class mail, postage prepaid, addressed (until another address is filed in writing by the Company with the Trustee), as follows: [ ]. Any notice, election, request or demand by the Company or any Securityholder or by any other Person pursuant to this Indenture to or upon the Trustee shall be deemed to have been sufficiently given or made, for all purposes, if given or made in writing at the Corporate Trust Office of the Trustee. Notwithstanding anything herein to the contrary, where reference herein is made to notice of any event (including notice of redemption) to a Securityholder of Global Securities, whether by mail or otherwise, such notice shall be sufficiently given when delivered to the Depository (or its designee) pursuant to the customary procedures of the Depository.

Section 13.05 Governing Law; Jury Trial Waiver.

THIS INDENTURE AND EACH SECURITY, AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS INDENTURE AND EACH SECURITY, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK (WITHOUT REGARD TO THE CONFLICTS OF LAWS PROVISIONS THEREOF). EACH OF THE COMPANY AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE SECURITIES OR THE TRANSACTION CONTEMPLATED HEREBY.

Section 13.06 Treatment of Securities as Debt.

It is intended that the Securities will be treated as indebtedness and not as equity for federal income tax purposes. The provisions of this Indenture shall be interpreted to further this intention.

Section 13.07 Certificates and Opinions as to Conditions Precedent.

(a) Upon any application or demand by the Company to the Trustee to take any action under any of the provisions of this Indenture, the Company shall furnish to the Trustee an Officer's Certificate stating that all covenants and conditions precedent provided for in this Indenture (other than the certificate to be delivered pursuant to Section 13.12) relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such covenants and conditions precedent have been complied with.

(b) Each certificate or opinion provided for in this Indenture and delivered to the Trustee with respect to compliance with a condition or covenant in this Indenture shall include (i) a statement that the Person making such certificate or opinion has read such covenant or condition; (ii) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based; (iii) a statement that, in the opinion of such Person, he has made such examination or investigation as is reasonably necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and (iv) a statement as to whether or not, in the opinion of such Person, such condition or covenant has been complied with.

Section 13.08 Payments on Business Days.

Except as provided pursuant to Section 2.01 pursuant to a Board Resolution, and set forth in an Officer's Certificate, or established in one or more indentures supplemental to this Indenture, in any case where the date that principal of, interest and/or premium, if any, on any Security is due or otherwise payable shall not be a Business Day or is a day on which the banking institutions in the city of the office of the Paying Agent are authorized or obligated by law to close or be closed, then payment of principal, premium, if any, and/or interest may be made on the next succeeding day that is a Business Day and is not a day on which the banking institutions in the city of the office of the Paying Agent are authorized or obligated by law to close or be closed with the same force and effect as if made on the nominal date of maturity or redemption, and no interest shall accrue for the period after such nominal date.

Section 13.09 Conflict with Trust Indenture Act.

If and to the extent that any provision of this Indenture limits, qualifies or conflicts with the duties imposed by Sections 310 to 317, inclusive, of the Trust Indenture Act, such imposed duties shall control.

Section 13.10 Counterparts.

This Indenture may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute but one and the same instrument. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

Section 13.11 Separability.

In case any one or more of the provisions contained in this Indenture or in the Securities of any series shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Indenture or of such Securities, but this Indenture and such Securities shall be construed as if such invalid or illegal or unenforceable provision had never been contained herein or therein.

Section 13.12 Compliance Certificates.

The Company shall deliver to the Trustee, within 120 days after the end of each fiscal year during which any Securities of any series were outstanding, an Officer's Certificate stating whether or not the signers know of any Event of Default that occurred during such fiscal year. Such certificate shall contain a certification from the principal executive officer, principal financial officer or principal accounting officer of the Company that a review has been conducted of the activities of the Company and the Company's performance under this Indenture and that the Company has complied with all conditions and covenants under this Indenture. For purposes of this Section 13.12, such compliance shall be determined without regard to any period of grace or requirement of notice provided under this Indenture. If the officer of the Company signing such certificate has knowledge of such an Event of Default, the certificate shall describe any such Event of Default and its status.

Section 13.13 USA PATRIOT ACT.

The parties hereto acknowledge that in accordance with Section 326 of the USA PATRIOT Act, the Trustee, like all financial institutions and in order to help fight the funding of terrorism and money laundering, is required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens an account with the Trustee. The parties to this Indenture agree that they will provide the Trustee with such information as it may request in order for the Trustee to satisfy the requirements of the USA PATRIOT Act.

Section 13.14 Calculations.

It is understood that the Trustee nor the Paying Agent shall have no responsibility for any calculations hereunder and shall be entitled to conclusively rely on the calculations of the Company without any independent verification or investigation.

**IN WITNESS WHEREOF**, the parties hereto have caused this Indenture to be duly executed all as of the day and year first above written.

**AKERO THERAPEUTICS, INC.**, as Issuer

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**[TRUSTEE]**, as Trustee

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

Signature Page to Form of Indenture

## TRUST INDENTURE ACT CROSS-REFERENCE TABLE<sup>2</sup>

<b>Section of Trust Indenture Act of 1939, as amended</b>	<b>Section of Indenture</b>
310(a)	7.09
310(b)	7.08
	7.10
310(c)	Inapplicable
311(a)	7.13
311(b)	7.13
311(c)	Inapplicable
312(a)	5.01
	5.02(a)
312(b)	5.02(c)
312(c)	5.02(c)
313(a)	5.04(a)
313(b)	5.04(b)
313(c)	5.04(a)
	5.04(b)
313(d)	5.04(c)
314(a)	5.03
	13.12
314(b)	Inapplicable
314(c)	13.07(a)
314(d)	Inapplicable
314(e)	13.07(b)
314(f)	Inapplicable
315(a)	7.01(a)
	7.01(b)
315(b)	7.14
315(c)	7.01(a)
315(d)	7.01(b)
315(e)	6.07
316(a)	6.06
	8.04
316(b)	6.04
316(c)	8.01
317(a)	6.02
317(b)	4.03
318(a)	13.09

<sup>2</sup> This Cross-Reference Table does not constitute part of the Indenture and shall not have any bearing on the interpretation of any of its terms or provisions.

**AKERO THERAPEUTICS, INC.,**

**Issuer**

**AND**

**[TRUSTEE],**

**Trustee**

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**INDENTURE**

**Dated as of [●], 202[●]**

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**Subordinated Debt Securities**

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<sup>1</sup> This Table of Contents does not constitute part of the Indenture and shall not have any bearing on the interpretation of any of its terms or provisions.

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## INDENTURE

INDENTURE, dated as of [●], 202[●], among AKERO THERAPEUTICS, INC., a Delaware corporation (the “Company”), and [TRUSTEE] as trustee (the “Trustee”):

WHEREAS, for its lawful corporate purposes, the Company has duly authorized the execution and delivery of this Indenture to provide for the issuance of subordinated debt securities (hereinafter referred to as the “Securities”), in an unlimited aggregate principal amount to be issued from time to time in one or more series as in this Indenture provided, as registered Securities without coupons, to be authenticated by the certificate of the Trustee;

WHEREAS, to provide the terms and conditions upon which the Securities are to be authenticated, issued and delivered, the Company has duly authorized the execution of this Indenture; and

WHEREAS, all things necessary to make this Indenture a valid and binding agreement of the Company, in accordance with its terms, have been done.

NOW, THEREFORE, in consideration of the premises and the purchase of the Securities by the holders thereof, it is mutually covenanted and agreed as follows for the equal and ratable benefit of the holders of Securities:

### ARTICLE 1 DEFINITIONS

#### Section 1.01 Definitions of Terms.

The terms defined in this Section (except as in this Indenture or any indenture supplemental hereto otherwise expressly provided or unless the context otherwise requires) for all purposes of this Indenture and of any indenture supplemental hereto shall have the respective meanings specified in this Section and shall include the plural as well as the singular. All other terms used in this Indenture that are defined in the Trust Indenture Act of 1939, as amended, or that are by reference in such Act defined in the Securities Act of 1933, as amended (except as herein or any indenture supplemental hereto otherwise expressly provided or unless the context otherwise requires), shall have the meanings assigned to such terms in said Trust Indenture Act and in said Securities Act as in force at the date of the execution of this instrument.

“**Authenticating Agent**” means an authenticating agent with respect to all or any of the series of Securities appointed by the Trustee pursuant to Section 2.10.

“**Bankruptcy Law**” means Title 11, U.S. Code, or any similar federal or state law for the relief of debtors.

“**Board of Directors**” means the Board of Directors (or the functional equivalent thereof) of the Company or any duly authorized committee of such Board.

“**Board Resolution**” means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification and delivered to the Trustee.

“**Business Day**” means, with respect to any series of Securities, any day other than a day on which federal or state banking institutions in the Borough of Manhattan, the City of New York, or at a place of payment, are authorized or obligated by law, executive order or regulation to close.

“**Commission**” means the Securities and Exchange Commission, as from time to time constituted, created under the Exchange Act, or, if at any time after the execution of this instrument such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties at such time.

“**Company**” means Akero Therapeutics, Inc., a corporation duly organized and existing under the laws of the State of Delaware, and, subject to the provisions of Article 10, shall also include its successors and assigns.

“**Company Order**” means a written order of the Company, signed by an Officer of the Company, and delivered to the Trustee.

“**Corporate Trust Office**” means the office of the Trustee at which, at any particular time, its corporate trust business shall be administered, which office at the date hereof is located at .

“**Custodian**” means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

“**Defaulted Interest**” has the meaning set forth in Section 2.03.

“**Depository**” means, with respect to Securities of any series for which the Company shall determine that such Securities will be issued as a Global Security, The Depository Trust Company, another clearing agency, or any successor registered as a clearing agency under the Exchange Act, or other applicable statute or regulation, which, in each case, shall be designated by the Company pursuant to either Section 2.01 or 2.11.

“**Event of Default**” means, with respect to Securities of a particular series, any event specified in Section 6.01, continued for the period of time, if any, therein designated.

“**Exchange Act**” means the United States Securities and Exchange Act of 1934, as amended, and the rules and regulations promulgated by the Commission thereunder.

“**Global Security**” means a Security issued to evidence all or a part of any series of Securities which is executed by the Company and authenticated and delivered by the Trustee to the Depository or pursuant to the Depository’s instruction, all in accordance with the Indenture, which shall be registered in the name of the Depository or its nominee.

“**Governmental Obligations**” means securities that are (a) direct obligations of the United States of America for the payment of which its full faith and credit is pledged or (b) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America, the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America that, in either case, are not callable or redeemable at the option of the issuer thereof at any time prior to the stated maturity of the applicable series of Securities, and shall also include a depositary receipt issued by a bank or trust company as custodian with respect to any such Governmental Obligation or a specific payment of principal of or interest on any such Governmental Obligation held by such custodian for the account of the holder of such depositary receipt; *provided, however*, that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depositary receipt from any amount received by the custodian in respect of the Governmental Obligation or the specific payment of principal of or interest on the Governmental Obligation evidenced by such depositary receipt.

“**herein**”, “**hereof**” and “**hereunder**”, and other words of similar import, refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

“**Indenture**” means this instrument as originally executed or as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into in accordance with the terms hereof and shall include the terms of particular series of Securities established as contemplated by Section 2.01.

“**Interest Payment Date**”, when used with respect to any installment of interest on a Security of a particular series, means the date specified in such Security or in a Board Resolution or in an indenture supplemental hereto with respect to such series as the fixed date on which an installment of interest with respect to Securities of that series is due and payable.

“**Officer**” means, with respect to the Company, the Chairman of the Board of Directors, a Chief Executive Officer, a President, a Chief Financial Officer, a Chief Operating Officer, any Executive Vice President, any Senior Vice President, any Vice President, the Treasurer or any Assistant Treasurer, the Controller or any Assistant Controller or the Secretary or any Assistant Secretary.

“**Officer’s Certificate**” means a certificate signed by any Officer. Each such certificate shall include the statements provided for in Section 13.07, if and to the extent required by the provisions thereof.

“**Opinion of Counsel**” means an opinion in writing subject to customary exceptions of legal counsel, who may be an employee of or counsel for the Company, that is delivered to the Trustee in accordance with the terms hereof. Each such opinion shall include the statements provided for in Section 13.07, if and to the extent required by the provisions thereof.

“**Outstanding**”, when used with reference to Securities of any series, means, subject to the provisions of Section 8.04, as of any particular time, all Securities of that series theretofore authenticated and delivered by the Trustee under this Indenture, except (a) Securities theretofore canceled by the Trustee or any paying agent, or delivered to the Trustee or any paying agent for cancellation or that have previously been canceled; (b) Securities or portions thereof for the payment or redemption of which moneys or Governmental Obligations in the necessary amount shall have been deposited in trust with the Trustee or with any paying agent (other than the Company) or shall have been set aside and segregated in trust by the Company (if the Company shall act as its own paying agent); *provided, however*, that if such Securities or portions of such Securities are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as provided in Article 3, or provision satisfactory to the Trustee shall have been made for giving such notice; and (c) Securities in lieu of or in substitution for which other Securities shall have been authenticated and delivered pursuant to the terms of Section 2.07.

“**Person**” means any individual, corporation, partnership, joint venture, joint-stock company, limited liability company, association, trust, unincorporated organization, any other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

“**Predecessor Security**” of any particular Security means every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security; and, for the purposes of this definition, any Security authenticated and delivered under Section 2.07 in lieu of a lost, destroyed or stolen Security shall be deemed to evidence the same debt as the lost, destroyed or stolen Security.

“**Responsible Officer**” when used with respect to the Trustee means any officer within the corporate trust department of the Trustee, including any vice president, assistant vice president, assistant secretary, assistant treasurer, trust officer or any other officer of the Trustee who customarily performs functions similar to those performed by the Persons who at the time shall be such officers, respectively, or to whom any corporate trust matter relating to this Indenture is referred because of such person’s knowledge of and familiarity with the particular subject and, in each case, who shall have direct responsibility for the administration of this Indenture (which, for the avoidance of doubt, includes without limitation any supplemental indenture hereto).

“**Securities**” has the meaning stated in the first recital of this Indenture and more particularly means any Securities authenticated and delivered under this Indenture.

“**Securityholder**”, “**holder**”, “**registered holder**”, or other similar term, means the Person or Persons in whose name or names a particular Security is registered on the Security Register kept for that purpose in accordance with the terms of this Indenture.

“**Security Register**” and “**Security Registrar**” shall have the meanings as set forth in Section 2.05.

“**Subsidiary**” means, with respect to any Person:

(1) any corporation or company a majority of whose capital stock with voting power, under ordinary circumstances, to elect directors is, at the date of determination, directly or indirectly, owned by such Person (a “subsidiary”), by one or more subsidiaries of such Person or by such Person and one or more subsidiaries of such Person;

(2) a partnership in which such Person or a subsidiary of such Person is, at the date of determination, a general partner of such partnership; or

(3) any partnership, limited liability company or other Person in which such Person, a subsidiary of such Person or such Person and one or more subsidiaries of such Person, directly or indirectly, at the date of determination, have (x) at least a majority ownership interest or (y) the power to elect or appoint or direct the election or appointment of the managing partner or member of such Person or, if applicable, a majority of the directors or other governing body of such Person.

“**Trustee**” means \_\_\_\_\_, and, subject to the provisions of Article 7, shall also include its successors and assigns, and, if at any time there is more than one Person acting in such capacity hereunder, “Trustee” shall mean each such Person. The term “Trustee” as used with respect to a particular series of the Securities shall mean the trustee with respect to that series.

“**Trust Indenture Act**” means the Trust Indenture Act of 1939, as amended and in effect from time to time.

“**U.S. dollar**” or “**\$**” means the lawful currency of the United States of America.

## **ARTICLE 2**

### **ISSUE, DESCRIPTION, TERMS, EXECUTION, REGISTRATION AND EXCHANGE OF SECURITIES**

#### Section 2.01 Designation and Terms of Securities.

(a) The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited. The Securities may be issued in one or more series up to the aggregate principal amount of Securities of that series from time to time authorized by or pursuant to a Board Resolution or pursuant to one or more indentures supplemental hereto. Prior to the initial issuance of Securities of any series, there shall be established in or pursuant to a Board Resolution, and set forth in an Officer’s Certificate or established in one or more indentures supplemental hereto:

- (1) the title of the Securities of the series (which shall distinguish the Securities of that series from all other Securities);

- (2) any limit upon the aggregate principal amount of the Securities of that series which may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or in exchange for, or in lieu of, other Securities of that series);
- (3) the date or dates on which the principal of the Securities of the series is payable;
- (4) if the price (expressed as a percentage of the aggregate principal amount thereof) at which such 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 Securities that is convertible into another security or the method by which any such portion shall be determined;
- (5) the rate or rates at which the Securities of the series shall bear interest or the manner of calculation of such rate or rates, if any;
- (6) the date or dates from which such interest shall accrue, the Interest Payment Dates on which such interest will be payable or the manner of determination of such Interest Payment Dates, the place(s) of payment, and the record date for the determination of holders to whom interest is payable on any such Interest Payment Dates or the manner of determination of such record dates;
- (7) the right, if any, to extend the interest payment periods and the duration of such extension;
- (8) the period or periods within which, the price or prices at which and the terms and conditions upon which Securities of the series may be redeemed, converted or exchanged, in whole or in part;
- (9) the obligation, if any, of the Company to redeem or purchase Securities of the series pursuant to any sinking fund, mandatory redemption, or analogous provisions (including payments made in cash in satisfaction of future sinking fund obligations) or at the option of a holder thereof and the period or periods within which, the price or prices at which, and the terms and conditions upon which, Securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;
- (10) the form of the Securities of the series including the form of the Certificate of Authentication for such series;
- (11) if other than minimum denominations of one thousand U.S. dollars (\$1,000) or any integral multiple of \$1,000 thereof, the denominations in which the Securities of the series shall be issuable;
- (12) any and all other terms (including terms, to the extent applicable, relating to any auction or remarketing of the Securities of that series and any security for the obligations of the Company with respect to such Securities) with respect to such series (which terms shall not be inconsistent with the terms of this Indenture, as amended by any supplemental indenture) including any terms which may be required by or advisable under United States laws or regulations or advisable in connection with the marketing of Securities of that series;
- (13) whether the 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;
- (14) whether the Securities will be convertible into or exchangeable for shares of common stock, preferred stock or other securities of the Company or any other Person and, if so, the terms and conditions upon which such 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 the Company's option or the holders' option) conversion or exchange features, and the applicable conversion or exchange period;
- (15) if other than the full principal amount thereof, the portion of the principal amount of Securities of the series which shall be payable upon declaration of acceleration of the maturity thereof pursuant to Section 6.01;
- (16) any additional or alternative Events of Default;



(17) additional or alternative covenants (which may include, among other restrictions, restrictions on the Company's ability or the ability of the Company's Subsidiaries to: incur additional indebtedness; issue additional securities; create liens; pay dividends or make distributions in respect of the capital stock of the Company or the Company's Subsidiaries; redeem capital stock; place restrictions on the Company's Subsidiaries' ability to pay dividends, make distributions or transfer assets; make investments or other restricted payments; sell or otherwise dispose of assets; enter into sale-leaseback transactions; engage in transactions with stockholders or affiliates; issue or sell stock of the Company's Subsidiaries; or effect a consolidation or merger) or financial covenants (which may include, among other financial covenants, financial covenants that require the Company and its Subsidiaries to maintain specified interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios) provided for with respect to the Securities of the series;

(18) the currency or currencies, including composite currencies, in which payment of the principal of (and premium, if any) and interest, if any, on such Securities shall be payable (if other than the currency of the United States of America), which unless otherwise specified shall be the currency of the United States of America as at the time of payment is legal tender for payment of public or private debts;

(19) if the principal of (and premium, if any) or interest, if any, on such Securities is to be payable, at the election of the Company or any holder thereof, in a coin or currency other than that in which such Securities are stated to be payable, then the period or periods within which, and the terms and conditions upon which, such election may be made;

(20) whether interest will be payable in cash or additional Securities at the Company's or the Securityholders' option and the terms and conditions upon which the election may be made;

(21) the terms and conditions, if any, upon which the Company shall pay amounts in addition to the stated interest, premium, if any and principal amounts of the Securities of the series to any Securityholder that is not a "United States person" for federal tax purposes;

(22) additional or alternative provisions, if any, related to defeasance and discharge of the offered Securities;

(23) the applicability of any guarantees;

(24) any restrictions on transfer, sale or assignment of the Securities of the series; and

(25) any other terms of the series.

All Securities of any one series shall be substantially identical except as may otherwise be provided in or pursuant to any such Board Resolution or in any indentures supplemental hereto.

If any of the terms of the series are established by action taken pursuant to a Board Resolution of the Company, a copy of an appropriate record of such action shall be certified by the secretary or an assistant secretary of the Company and delivered to the Trustee at or prior to the delivery of the Officer's Certificate of the Company setting forth the terms of the series.

Securities of any particular series may be issued at various times, with different dates on which the principal or any installment of principal is payable, with different rates of interest, if any, or different methods by which rates of interest may be determined, with different dates on which such interest may be payable and with different redemption dates.

#### Section 2.02 Form of Securities and Trustee's Certificate.

The Securities of any series and the Trustee's certificate of authentication to be borne by such Securities shall be substantially of the tenor and purport as set forth in one or more indentures supplemental hereto or as provided in a Board Resolution, and set forth in an Officer's Certificate, and they may have such letters, numbers or other marks of identification or designation and such legends or endorsements printed, lithographed or engraved thereon as the Company may deem appropriate and as are not inconsistent with the provisions of this Indenture, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any securities exchange on which Securities of that series may be listed, or to conform to usage.

Section 2.03 Denominations: Provisions for Payment.

The Securities shall be issuable as registered Securities and in the minimum denominations of one thousand U.S. dollars (\$1,000) or any integral multiple of \$1,000 thereof, subject to Section 2.01(a)(11). The Securities of a particular series shall bear interest payable on the dates and at the rate specified with respect to that series. Subject to Section 2.01(a)(18), the principal of and the interest on the Securities of any series, as well as any premium thereon in case of redemption thereof prior to maturity, shall be payable in the coin or currency of the United States of America that at the time is legal tender for public and private debt, at the office or agency of the Company maintained for that purpose. Each Security shall be dated the date of its authentication. Interest on the Securities shall be computed on the basis of a 360-day year composed of twelve 30-day months.

The interest installment on any Security that is payable, and is punctually paid or duly provided for, on any Interest Payment Date for Securities of that series shall be paid to the Person in whose name said Security (or one or more Predecessor Securities) is registered at the close of business on the regular record date for such interest installment. In the event that any Security of a particular series or portion thereof is called for redemption and the redemption date is subsequent to a regular record date with respect to any Interest Payment Date and prior to such Interest Payment Date, interest on such Security will be paid upon presentation and surrender of such Security as provided in Section 3.03.

Any interest on any Security that is payable, but is not punctually paid or duly provided for, on any Interest Payment Date for Securities of the same series (herein called “**Defaulted Interest**”) shall forthwith cease to be payable to the registered holder on the relevant regular record date by virtue of having been such holder; and such Defaulted Interest shall be paid by the Company, at its election, as provided in clause (1) or clause (2) below:

(1) The Company may elect to make payment of any Defaulted Interest on Securities to the Persons in whose names such Securities (or their respective Predecessor Securities) are registered at the close of business on a special record date for the payment of such Defaulted Interest, which shall be fixed in the following manner: the Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each such Security and the date of the proposed payment, and at the same time the Company shall deposit with the Trustee an amount of money equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Company shall fix a special record date for the payment of such Defaulted Interest which shall not be more than 15 nor less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Company shall promptly notify the Trustee in writing of such special record date and in such notice, instruct the Trustee to send such notice to holders, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the special record date therefor to be sent electronically or mailed, first class postage prepaid, to each Securityholder at his or her address as it appears in the Security Register (as hereinafter defined), not less than 10 days prior to such special record date. Notice of the proposed payment of such Defaulted Interest and the special record date therefor having been sent as aforesaid, such Defaulted Interest shall be paid to the Persons in whose names such Securities (or their respective Predecessor Securities) are registered on such special record date.

(2) The Company may make or cause to be made payment of any Defaulted Interest on any Securities in any other lawful manner not inconsistent with the requirements of any securities exchange on which such Securities may be listed, and upon such notice as may be required by such exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

Unless otherwise set forth in a Board Resolution or one or more indentures supplemental hereto establishing the terms of any series of Securities pursuant to Section 2.01 hereof, the term “regular record date” as used in this Section with respect to a series of Securities and any Interest Payment Date for such series shall mean either (i) the fifteenth day of the month immediately preceding the month in which an Interest Payment Date established for such series pursuant to Section 2.01 hereof shall occur, if such Interest Payment Date is the first day of a month, or (ii) the first day of the month in which an Interest Payment Date established for such series pursuant to Section 2.01 hereof shall occur, if such Interest Payment Date is the fifteenth day of a month, whether or not such date is a Business Day.

Subject to the foregoing provisions of this Section, each Security of a series delivered under this Indenture upon transfer of or in exchange for or in lieu of any other Security of such series shall carry the rights to interest accrued and unpaid, and to accrue, that were carried by such other Security.

#### Section 2.04 Execution and Authentications.

The Securities shall be signed on behalf of the Company by one of its Officers. Signatures may be in the form of a manual or facsimile signature.

The Company may use the facsimile signature of any Person who shall have been an Officer, notwithstanding the fact that at the time the Securities shall be authenticated and delivered or disposed of such Person shall have ceased to be such an officer of the Company. The Securities may contain such notations, legends or endorsements required by law, stock exchange rule or usage. Each Security shall be dated the date of its authentication by the Trustee.

A Security shall not be valid until authenticated manually by an authorized signatory of the Trustee, or by an Authenticating Agent. Such signature shall be conclusive evidence that the Security so authenticated has been duly authenticated and delivered hereunder and that the holder is entitled to the benefits of this Indenture. At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities, signed by an Officer, and the Trustee in accordance with such Company Order shall authenticate and deliver such Securities.

In authenticating such Securities and accepting the additional responsibilities under this Indenture in relation to such Securities, the Trustee shall receive, and (subject to Section 7.01) shall be fully protected in conclusively relying upon, an Officer’s Certificate and an Opinion of Counsel stating that the form and terms thereof have been established in conformity with the provisions of this Indenture, that all conditions precedent in connection with the issuance, authentication and delivery of such Securities have been met and that such Securities are legal, valid and binding obligations against the Company, enforceable against it in accordance with its terms, subject to customary exceptions and qualifications.

The Trustee shall not be required to authenticate such Securities if the issue of such Securities pursuant to this Indenture will affect the Trustee’s own rights, duties or immunities under the Securities and this Indenture or otherwise in a manner that is not reasonably acceptable to the Trustee.

#### Section 2.05 Registration of Transfer and Exchange.

(a) Securities of any series may be exchanged upon presentation thereof at the office or agency of the Company designated for such purpose, for other Securities of such series of authorized denominations, and for a like aggregate principal amount, upon payment of a sum sufficient to cover any tax or other governmental charge in relation thereto, all as provided in this Section. In respect of any Securities so surrendered for exchange, the Company shall execute, the Trustee shall authenticate and such office or agency shall deliver in exchange therefor the Security or Securities of the same series that the Securityholder making the exchange shall be entitled to receive, bearing numbers not contemporaneously outstanding.

(b) The Company shall keep, or cause to be kept, at its office or agency designated for such purpose a register or registers (herein referred to as the “**Security Register**”) in which, subject to such reasonable regulations as it may prescribe, the Company shall register the Securities and the transfers of Securities as in this Article provided and which at all reasonable times shall be open for inspection by the Trustee. The registrar for the purpose of registering Securities and transfer of Securities as herein provided shall be appointed as authorized by Board Resolution (the “**Security Registrar**”).

Upon surrender for transfer of any Security at the office or agency of the Company designated for such purpose, the Company shall execute, the Trustee shall authenticate and such office or agency shall deliver in the name of the transferee or transferees a new Security or Securities of the same series as the Security presented for a like aggregate principal amount.

All Securities presented or surrendered for exchange or registration of transfer, as provided in this Section, shall be accompanied (if so required by the Company or the Security Registrar) by a written instrument or instruments of transfer, in form satisfactory to the Company or the Security Registrar, duly executed by the registered holder or by such holder's duly authorized attorney in writing.

(c) Except as provided pursuant to Section 2.01 pursuant to a Board Resolution, and set forth in an Officer's Certificate, or established in one or more indentures supplemental to this Indenture, no service charge shall be made for any exchange or registration of transfer of Securities, or issue of new Securities in case of partial redemption of any series, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge in relation thereto, other than exchanges pursuant to Section 2.06, Section 3.03(b) and Section 9.04 not involving any transfer.

(d) The Company shall not be required (i) to issue, exchange or register the transfer of any Securities during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of less than all the Outstanding Securities of the same series and ending at the close of business on the day of such mailing, nor (ii) to register the transfer of or exchange any Securities of any series or portions thereof called for redemption, other than the unredeemed portion of any such Securities being redeemed in part. The provisions of this Section 2.05 are, with respect to any Global Security, subject to Section 2.11 hereof.

The Trustee shall have no obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Security (including any transfers between or among depository participants or beneficial owners of interests in any Global Security) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by the terms of, this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

Neither the Trustee nor any Agent shall have any responsibility or liability for any actions taken or not taken by the Depository.

#### Section 2.06 Temporary Securities.

Pending the preparation of definitive Securities of any series, the Company may execute, and the Trustee shall, upon receipt of a Company Order, authenticate and deliver, temporary Securities (printed, lithographed or typewritten) of any authorized denomination. Such temporary Securities shall be substantially in the form of the definitive Securities in lieu of which they are issued, but with such omissions, insertions and variations as may be appropriate for temporary Securities, all as may be determined by the Company. Every temporary Security of any series shall be executed by the Company and be authenticated by the Trustee upon the same conditions and in substantially the same manner, and with like effect, as the definitive Securities of such series. Without unnecessary delay the Company will execute and will furnish definitive Securities of such series and thereupon any or all temporary Securities of such series may be surrendered in exchange therefor (without charge to the holders), at the office or agency of the Company designated for the purpose, and the Trustee shall, upon receipt of a Company Order, authenticate and such office or agency shall deliver in exchange for such temporary Securities an equal aggregate principal amount of definitive Securities of such series, unless the Company advises the Trustee to the effect that definitive Securities need not be executed and furnished until further notice from the Company. Until so exchanged, the temporary Securities of such series shall be entitled to the same benefits under this Indenture as definitive Securities of such series authenticated and delivered hereunder.

Section 2.07 Mutilated, Destroyed, Lost or Stolen Securities.

In case any temporary or definitive Security shall become mutilated or be destroyed, lost or stolen, the Company (subject to the next succeeding sentence) shall execute, and upon receipt of a Company Order the Trustee (subject as aforesaid) shall authenticate and deliver, a new Security of the same series, bearing a number not contemporaneously outstanding, in exchange and substitution for the mutilated Security, or in lieu of and in substitution for the Security so destroyed, lost or stolen. In every case the applicant for a substituted Security shall furnish to the Company and the Trustee such security or indemnity as may be required by them to save each of them harmless, and, in every case of destruction, loss or theft, the applicant shall also furnish to the Company and the Trustee evidence to their satisfaction of the destruction, loss or theft of the applicant's Security and of the ownership thereof. The Trustee may authenticate any such substituted Security and deliver the same upon receipt of a Company Order. Upon the issuance of any substituted Security, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

In case any Security that has or is about to become due and payable, whether upon maturity of the Securities of a series or upon declaration or otherwise shall become mutilated or be destroyed, lost or stolen, the Company may, instead of issuing a substitute Security, pay or authorize the payment of the same (without surrender thereof except in the case of a mutilated Security) if the applicant for such payment shall furnish to the Company and the Trustee such security or indemnity as they may require to save them harmless, and, in case of destruction, loss or theft, evidence to the satisfaction of the Company and the Trustee of the destruction, loss or theft of such Security and of the ownership thereof.

Every replacement Security issued pursuant to the provisions of this Section shall constitute an additional contractual obligation of the Company whether or not the mutilated, destroyed, lost or stolen Security shall be found at any time, or be enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of the same series duly issued hereunder. All Securities shall be held and owned upon the express condition that the foregoing provisions are exclusive with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities, and shall preclude (to the extent lawful) any and all other rights or remedies, notwithstanding any law or statute existing or hereafter enacted to the contrary with respect to the replacement or payment of negotiable instruments or other securities without their surrender.

Section 2.08 Cancellation.

All Securities surrendered for the purpose of payment, redemption, exchange or registration of transfer shall, if surrendered to the Company or any paying agent, be delivered to the Trustee for cancellation, or, if surrendered to the Trustee, shall be cancelled by it, and no Securities shall be issued in lieu thereof except as expressly required or permitted by any of the provisions of this Indenture. On written request of the Company at the time of such surrender, the Trustee shall deliver to the Company evidence of cancellation for such canceled Securities held by the Trustee. The Trustee shall cancel and dispose of canceled Securities in accordance with its standard procedures and deliver a certificate of disposition to the Company. If the Company shall otherwise acquire any of the Securities, however, such acquisition shall not operate as a redemption or satisfaction of the indebtedness represented by such Securities unless and until the same are delivered to the Trustee for cancellation.

Section 2.09 Benefits of Indenture.

Nothing in this Indenture or in the Securities, express or implied, shall give or be construed to give to any Person, other than the parties hereto and the holders of the Securities (and, with respect to the provisions of Article 14, the holders of any indebtedness of the Company to which the Securities of any series are subordinated) any legal or equitable right, remedy or claim under or in respect of this Indenture, or under any covenant, condition or provision herein contained; all such covenants, conditions and provisions being for the sole benefit of the parties hereto and of the holders of the Securities (and, with respect to the provisions of Article 14, the holders of any indebtedness of the Company to which the Securities of any series are subordinated).

#### Section 2.10 Authenticating Agent.

So long as any of the Securities of any series remain Outstanding there may be an Authenticating Agent for any or all such series of Securities which the Trustee shall have the right to appoint. Said Authenticating Agent shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon exchange, transfer or partial redemption thereof, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. All references in this Indenture to the authentication of Securities by the Trustee shall be deemed to include authentication by an Authenticating Agent for such series. Each Authenticating Agent shall be acceptable to the Company and shall be a corporation that has a combined capital and surplus, as most recently reported or determined by it, sufficient under the laws of any jurisdiction under which it is organized or in which it is doing business to conduct a trust business, and that is otherwise authorized under such laws to conduct such business and is subject to supervision or examination by federal or state authorities. If at any time any Authenticating Agent shall cease to be eligible in accordance with these provisions, it shall resign immediately.

Any Authenticating Agent may at any time resign by giving written notice of resignation to the Trustee and to the Company. The Trustee may at any time (and upon request by the Company shall) terminate the agency of any Authenticating Agent by giving written notice of termination to such Authenticating Agent and to the Company. Upon resignation, termination or cessation of eligibility of any Authenticating Agent, the Trustee may appoint an eligible successor Authenticating Agent acceptable to the Company. Any successor Authenticating Agent, upon acceptance of its appointment hereunder, shall become vested with all the rights, powers and duties of its predecessor hereunder as if originally named as an Authenticating Agent pursuant hereto.

#### Section 2.11 Global Securities.

(a) If the Company shall establish pursuant to Section 2.01 that the Securities of a particular series are to be issued as a Global Security, then the Company shall execute and the Trustee shall, in accordance with Section 2.04, authenticate and deliver, a Global Security that (i) shall represent, and shall be denominated in an amount equal to the aggregate principal amount of, all of the Outstanding Securities of such series, (ii) shall be registered in the name of the Depository or its nominee, (iii) shall be delivered by the Trustee to the Depository or held by it, pursuant to the Depository's instruction and (iv) shall bear a legend substantially to the following effect: "Except as otherwise provided in Section 2.11 of the Indenture, this Security may be transferred, in whole but not in part, only to another nominee of the Depository or to a successor Depository or to a nominee of such successor Depository."

(b) Notwithstanding the provisions of Section 2.05, the Global Security of a series may be transferred, in whole but not in part and in the manner provided in Section 2.05, only to another nominee of the Depository for such series, or to a successor Depository for such series selected or approved by the Company or to a nominee of such successor Depository.

(c) If at any time the Depository for a series of the Securities notifies the Company that it is unwilling or unable to continue as Depository for such series or if at any time the Depository for such series shall no longer be registered or in good standing under the Exchange Act, or other applicable statute or regulation, and a successor Depository for such series is not appointed by the Company within 90 days after the Company receives such notice or becomes aware of such condition, as the case may be, or if an Event of Default has occurred and is continuing and the Company has received a request from the Depository or from the Trustee, this Section 2.11 shall no longer be applicable to the Securities of such series and the Company will execute, and subject to Section 2.04, the Trustee will authenticate and deliver the Securities of such series in definitive registered form without coupons, in authorized denominations, and in an aggregate principal amount equal to the principal amount of the Global Security of such series in exchange for such Global Security. In addition, the Company may at any time determine that the Securities of any series shall no longer be represented by a Global Security and that the provisions of this Section 2.11 shall no longer apply to the Securities of such series. In such event the Company will execute and, subject to Section 2.04, the Trustee, upon receipt of an Officer's Certificate and a Company Order evidencing such determination by the Company, will authenticate and deliver the Securities of such series in definitive registered form without coupons, in authorized denominations, and in an aggregate principal amount equal to the principal amount of the Global Security of such series in exchange for such Global Security. Upon the exchange of the Global Security for such Securities in definitive registered form without coupons, in authorized denominations, the Global Security shall be canceled by the Trustee. Such Securities in definitive registered form issued in exchange for the Global Security pursuant to this Section 2.11(c) shall be registered in such names and in such authorized denominations as the Depository, pursuant to instructions from its direct or indirect participants or otherwise, shall instruct the Trustee in writing. The Trustee shall deliver such Securities to the Depository for delivery to the Persons in whose names such Securities are so registered.

**ARTICLE 3**  
**REDEMPTION OF SECURITIES AND SINKING FUND PROVISIONS**

Section 3.01 Redemption.

The Company may redeem the Securities of any series issued hereunder on and after the dates and in accordance with the terms established for such series pursuant to Section 2.01 hereof.

Section 3.02 Notice of Redemption.

(a) In case the Company shall desire to exercise such right to redeem all or, as the case may be, a portion of the Securities of any series in accordance with any right the Company reserved for itself to do so pursuant to Section 2.01 hereof, the Company shall, or shall cause the Trustee (upon 5 Business Days written notice, unless a shorter period shall be satisfactory to the Trustee) to, give notice of such redemption to holders of the Securities of such series to be redeemed by mailing, electronically or by first class postage prepaid mail, a notice of such redemption not less than 15 days and not more than 90 days, except that redemption notices may be sent more than 90 days prior to the redemption date if the notice is issued in connection with a defeasance of the Securities or a satisfaction and discharge, before the date fixed for redemption of that series to such holders (with a copy to the Trustee) at their last addresses as they shall appear upon the Security Register, unless a shorter period is specified in the Securities to be redeemed. Any notice that is mailed in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the registered holder receives the notice. In any case, failure duly to give such notice to the holder of any Security of any series designated for redemption in whole or in part, or any defect in the notice, shall not affect the validity of the proceedings for the redemption of any other Securities of such series or any other series. In the case of any redemption of Securities prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officer's Certificate evidencing compliance with any such restriction.

Each such notice of redemption shall specify the date fixed for redemption, if applicable, any record date with respect to such redemption and the redemption price at which Securities of that series are to be redeemed, and shall state that payment of the redemption price of such Securities to be redeemed will be made at the office or agency of the Company, upon presentation and surrender of such Securities, that interest accrued to the date fixed for redemption will be paid as specified in said notice, that from and after said date interest will cease to accrue and that the redemption is from a sinking fund, if such is the case. If less than all the Securities of a series are to be redeemed, the notice to the holders of Securities of that series to be redeemed in part shall specify the particular Securities to be so redeemed.

In case any Security is to be redeemed in part only, the notice that relates to such Security shall state the portion of the principal amount thereof to be redeemed, and shall state that on and after the redemption date, upon surrender of such Security, a new Security or Securities of such series in principal amount equal to the unredeemed portion thereof will be issued.

(b) If less than all the Securities of a series are to be redeemed, the Company shall give the Trustee at least 20 days' notice (unless a shorter notice shall be satisfactory to the Trustee) in advance of the date fixed for redemption as to the aggregate principal amount of Securities of the series to be redeemed, and thereupon the Trustee shall select, by lot or in such other manner as it shall deem appropriate and fair in its discretion (and subject to the applicable procedures of the Depository) and that may provide for the selection of a portion or portions (equal to one thousand U.S. dollars (\$1,000) or any integral multiple thereof) of the principal amount of such Securities of a denomination larger than \$1,000, the Securities to be redeemed and shall thereafter promptly notify the Company in writing of the numbers of the Securities to be redeemed, in whole or in part. The Company may, if and whenever it shall so elect, by delivery of instructions signed on its behalf by an Officer, instruct the Trustee or any paying agent to call all or any part of the Securities of a particular series for redemption and to send notice of redemption in the manner set forth in this Section, such notice to be in the name and at the expense of the Company. In any case in which notice of redemption is to be sent by the Trustee or any such paying agent, the Company shall deliver or cause to be delivered to, or permit to remain with, the Trustee or such paying agent, as the case may be, such Security Register, transfer books or other records, or suitable copies or extracts therefrom, sufficient to enable the Trustee or such paying agent to give any notice by mail that may be required under the provisions of this Section.

Section 3.03 Payment Upon Redemption.

(a) If the giving of notice of redemption shall have been completed as above provided, the Securities or portions of Securities of the series to be redeemed specified in such notice shall become due and payable on the date and at the place stated in such notice at the applicable redemption price, together with interest accrued to the date fixed for redemption and interest on such Securities or portions of Securities shall cease to accrue on and after the date fixed for redemption, unless the Company shall default in the payment of such redemption price and accrued interest with respect to any such Security or portion thereof. On presentation and surrender of such Securities on or after the date fixed for redemption at the place of payment specified in the notice, said Securities shall be paid and redeemed at the applicable redemption price for such series, together with interest accrued thereon to the date fixed for redemption (but if the date fixed for redemption is an interest payment date, the interest installment payable on such date shall be payable to the registered holder at the close of business on the applicable record date pursuant to Section 2.03).

(b) Upon presentation of any physical Security of such series that is to be redeemed in part only, the Company shall execute and the Trustee shall authenticate and the office or agency where the Security is presented shall deliver to the holder thereof, at the expense of the Company, a new Security of the same series of authorized denominations in principal amount equal to the unredeemed portion of the Security so presented.

Section 3.04 Sinking Fund.

The provisions of Sections 3.04, 3.05 and 3.06 shall be applicable to any sinking fund for the retirement of Securities of a series, except as otherwise specified as contemplated by Section 2.01 for Securities of such series.

The minimum amount of any sinking fund payment provided for by the terms of Securities of any series is herein referred to as a “mandatory sinking fund payment,” and any payment in excess of such minimum amount provided for by the terms of Securities of any series is herein referred to as an “optional sinking fund payment”. If provided for by the terms of Securities of any series, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 3.05. Each sinking fund payment shall be applied to the redemption of Securities of any series as provided for by the terms of Securities of such series.

Section 3.05 Satisfaction of Sinking Fund Payments with Securities.

The Company (i) may deliver Outstanding Securities of a series and (ii) may apply as a credit Securities of a series that have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, in each case in satisfaction of all or any part of any sinking fund payment with respect to the Securities of such series required to be made pursuant to the terms of such Securities as provided for by the terms of such series, *provided* that such Securities have not been previously so credited. Such Securities shall be received and credited for such purpose by the Trustee at the redemption price specified in such Securities for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly.

Section 3.06 Redemption of Securities for Sinking Fund.

Not less than 45 days prior to each sinking fund payment date for any series of Securities (unless a shorter period shall be satisfactory to the Trustee), the Company will deliver to the Trustee an Officer’s Certificate specifying the amount of the next ensuing sinking fund payment for that series pursuant to the terms of the series, the portion thereof, if any, that is to be satisfied by delivering and crediting Securities of that series pursuant to Section 3.05 and the basis for such credit and will, together with such Officer’s Certificate, deliver to the Trustee any Securities to be so delivered. Not less than 30 days before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 3.02 and cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 3.02. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Section 3.03.



**ARTICLE 4  
COVENANTS**

Section 4.01 Payment of Principal, Premium and Interest.

The Company will duly and punctually pay or cause to be paid the principal of (and premium, if any) and interest on the Securities of that series at the time and place and in the manner provided herein and established with respect to such Securities. Payments of principal on the physical Securities may be made at the time provided herein and established with respect to such Securities by U.S. dollar check drawn on and mailed to the address of the Securityholder entitled thereto as such address shall appear in the Security Register, or U.S. dollar wire transfer to, a U.S. dollar account if such Securityholder shall have furnished wire instructions to the Trustee no later than 15 days prior to the relevant payment date. Payments of interest on the Securities may be made at the time provided herein and established with respect to such Securities by U.S. dollar check mailed to the address of the Securityholder entitled thereto as such address shall appear in the Security Register, or U.S. dollar wire transfer to an account in the United States if such Securityholder shall have furnished wire instructions in writing to the Security Registrar and the Trustee no later than 15 days prior to the relevant payment date.

Section 4.02 Maintenance of Office or Agency.

So long as any series of the Securities remain Outstanding, the Company agrees to maintain an office or agency with respect to each such series and at such other location or locations as may be designated as provided in this Section 4.02, where (i) Securities of that series may be presented for payment, (ii) Securities of that series may be presented as herein above authorized for registration of transfer and exchange, and (iii) notices in respect of the Securities of that series and this Indenture may be given or made, such designation to continue with respect to such office or agency until the Company shall, by written notice in an Officer's Certificate and delivered to the Trustee, designate some other office or agency for such purposes or any of them. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations and notices may be made at the Corporate Trust Office of the Trustee, and the Company hereby appoints the Trustee as its agent to receive all such presentations and notices; provided, however, the Trustee shall not be considered an agent of the Company for service of process.

Section 4.03 Paying Agents.

(a) If the Company shall appoint one or more paying agents for all or any series of the Securities, other than the Trustee, the Company will cause each such paying agent to execute and deliver to the Trustee an instrument in which such agent shall agree with the Trustee, subject to the provisions of this Section:

(1) that it will hold all sums held by it as such agent for the payment of the principal of (and premium, if any) or interest on the Securities of that series (whether such sums have been paid to it by the Company or by any other obligor of such Securities) in trust for the benefit of the Persons entitled thereto;

(2) that it will give the Trustee notice of any failure by the Company (or by any other obligor of such Securities) to make any payment of the principal of (and premium, if any) or interest on the Securities of that series when the same shall be due and payable;

(3) that it will, at any time during the continuance of any failure referred to in the preceding paragraph (a)(2) above, upon the written request of the Trustee, forthwith pay to the Trustee all sums so held in trust by such paying agent;

(4) that upon any receivership, insolvency, liquidation, bankruptcy, reorganization, readjustment, arrangement, composition or judicial proceedings affecting the Company, the Trustee will automatically be the Paying Agent; and

(5) that it will perform all other duties of paying agent as set forth in this Indenture.

(b) If the Company shall act as its own paying agent with respect to any series of the Securities, it will on or before each due date of the principal of (and premium, if any) or interest on Securities of that series, set aside, segregate and hold in trust for the benefit of the Persons entitled thereto a sum sufficient to pay such principal (and premium, if any) or interest so becoming due on Securities of that series until such sums shall be paid to such Persons or otherwise disposed of as herein provided and will promptly notify the Trustee of such action, or any failure (by it or any other obligor on such Securities) to take such action. Whenever the Company shall have one or more paying agents for any series of Securities, it will, prior to each due date of the principal of (and premium, if any) or interest on any Securities of that series, deposit with the paying agent a sum sufficient to pay the principal (and premium, if any) or interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium or interest, and (unless such paying agent is the Trustee) the Company will promptly notify the Trustee of this action or failure so to act.

(c) Notwithstanding anything in this Section to the contrary, (i) the agreement to hold sums in trust as provided in this Section is subject to the provisions of Section 11.05, and (ii) the Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or direct any paying agent to pay, to the Trustee all sums held in trust by the Company or such paying agent, such sums to be held by the Trustee upon the same terms and conditions as those upon which such sums were held by the Company or such paying agent; and, upon such payment by the Company or any paying agent to the Trustee, the Company or such paying agent shall be released from all further liability with respect to such money.

(d) The Company initially appoints the Trustee at its Corporate Trust Office as its paying agent with respect to the Securities.

#### Section 4.04 Appointment to Fill Vacancy in Office of Trustee.

The Company, whenever necessary to avoid or fill a vacancy in the office of Trustee, will appoint, in the manner provided in Section 7.10, a Trustee, so that there shall at all times be a Trustee hereunder.

#### Section 4.05 Compliance with Consolidation Provisions.

The Company will not, while any of the Securities remain Outstanding, consolidate with or merge into any other Person, in either case where the Company is not the survivor of such transaction, or sell or convey all or substantially all of its property to any other Person unless the provisions of Article 10 hereof are complied with.

### **ARTICLE 5 SECURITYHOLDERS' LISTS AND REPORTS BY THE COMPANY AND THE TRUSTEE**

#### Section 5.01 Company to Furnish Trustee Names and Addresses of Securityholders.

The Company will furnish or cause to be furnished to the Trustee (a) within 5 days after each regular record date (as defined in Section 2.03) a list, in such form as the Trustee may reasonably require, of the names and addresses of the holders of each series of Securities as of such regular record date, *provided* that the Company shall not be obligated to furnish or cause to be furnished such list at any time that the list shall not differ in any respect from the most recent list furnished to the Trustee by the Company and (b) at such other times as the Trustee may request in writing within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished; *provided, however*, that, in either case, no such list need be furnished for any series for which the Trustee shall be the Security Registrar.

Section 5.02 Preservation Of Information; Communications With Securityholders.

(a) The Trustee shall preserve, in as current a form as is reasonably practicable, all information as to the names and addresses of the holders of Securities contained in the most recent list furnished to it as provided in Section 5.01 and as to the names and addresses of holders of Securities received by the Trustee in its capacity as Security Registrar (if acting in such capacity).

(b) The Trustee may destroy any list furnished to it as provided in Section 5.01 upon receipt of a new list so furnished.

(c) Securityholders may communicate as provided in Section 312(b) of the Trust Indenture Act with other Securityholders with respect to their rights under this Indenture or under the Securities, and, in connection with any such communications, the Trustee shall satisfy its obligations under Section 312(b) of the Trust Indenture Act in accordance with the provisions of Section 312(b) of the Trust Indenture Act.

Section 5.03 Reports by the Company.

(a) The Company covenants and agrees to provide (which delivery may be via electronic mail) to the Trustee within 30 days, after the Company files the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the Commission may from time to time by rules and regulations prescribe) that the Company is required to file with the Commission pursuant to Section 13 or Section 15(d) of the Exchange Act; *provided, however*, the Company shall not be required to deliver to the Trustee any materials for which the Company has sought and received confidential treatment by the Commission; and *provided further*, that so long as such filings by the Company are available on the Commission's Electronic Data Gathering, Analysis and Retrieval System (EDGAR), or Interactive Data Electronic Applications (IDEA), or any successor system, such filings shall be deemed to have been filed with the Trustee for purposes hereof without any further action required by the Company; *provided* that an electronic link to such filing, together with an electronic notice of such filing have been sent to the Trustee it being understood that the Trustee shall have no responsibility to determine whether such filings have been made. For the avoidance of doubt, a failure by the Company to file annual reports, information and other reports with the Commission within the time period prescribed thereof by the Commission shall not be deemed a breach of this Section 5.03.

(b) Delivery of reports, information and documents to the Trustee under Section 5.03 is for informational purposes only and the information and the Trustee's receipt of the foregoing shall not constitute constructive notice of any information contained therein, or determinable from information contained therein including the Company's compliance with any of their covenants thereunder (as to which the Trustee is entitled to rely exclusively on an Officer's Certificate).

Section 5.04 Reports by the Trustee.

(a) If required by Section 313(a) of the Trust Indenture Act, the Trustee, within sixty (60) days after each May 15, commencing the calendar year after the year in which the first Securities are issued hereunder, shall transmit by mail, first class postage prepaid, to the Securityholders, as their names and addresses appear upon the Security Register, a brief report dated as of such May 15, which complies with Section 313(a) of the Trust Indenture Act.

(b) The Trustee shall comply with Section 313(b) and 313(c) of the Trust Indenture Act.

(c) A copy of each such report shall, at the time of such transmission to Securityholders, be filed by the Trustee with the Company, with each securities exchange upon which any Securities are listed (if so listed) and also with the Commission. The Company agrees to notify the Trustee in writing when any Securities become listed on any securities exchange or of any delisting thereof.

**ARTICLE 6**  
**REMEDIES OF THE TRUSTEE AND SECURITYHOLDERS ON**  
**EVENT OF DEFAULT**

Section 6.01 Events of Default.

(a) Whenever used herein with respect to Securities of a particular series, “Event of Default” means any one or more of the following events that has occurred and is continuing:

(1) the Company defaults in the payment of any installment of interest upon any of the Securities of that series, 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 the Company in accordance with the terms of any indenture supplemental hereto shall not constitute a default in the payment of interest for this purpose;

(2) the Company defaults in the payment of the principal of (or premium, if any, on) any of the Securities of that series 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 that series; provided, however, that a valid extension of the maturity of such Securities in accordance with the terms of any indenture supplemental hereto shall not constitute a default in the payment of principal or premium, if any;

(3) the Company fails to observe or perform any other of its covenants or agreements with respect to that series contained in this Indenture or otherwise established with respect to that series of Securities pursuant to Section 2.01 hereof (other than a covenant or agreement that has been expressly included in this Indenture solely for the benefit of one or more series of Securities other than such series) for a period of 90 days after the date on which written notice of such failure, requiring the same to be remedied and stating that such notice is a “**Notice of Default**” hereunder, shall have been given to the Company by the Trustee or to the Company and the Trustee by the holders of at least 25% in principal amount of the Securities of that series at the time Outstanding;

(4) the Company pursuant to or within the meaning of any Bankruptcy Law (i) commences a voluntary case, (ii) consents to the entry of an order for relief against it in an involuntary case, (iii) consents to the appointment of a Custodian of it or for all or substantially all of its property or (iv) makes a general assignment for the benefit of its creditors; or

(5) a court of competent jurisdiction enters an order under any Bankruptcy Law that (i) is for relief against the Company in an involuntary case, (ii) appoints a Custodian of the Company for all or substantially all of its property or (iii) orders the liquidation of the Company, and the order or decree remains unstayed and in effect for 90 days.

(b) In each and every such case (other than an Event of Default specified in clause (4) or clause (5) above), unless the principal of all the Securities of that series shall have already become due and payable, either the Trustee or the holders of not less than 25% in aggregate principal amount of the Securities of that series then Outstanding hereunder, by notice in writing to the Company (and to the Trustee if given by such Securityholders), may declare the principal of (and premium, if any, on) and accrued and unpaid interest on all the Securities of that series to be due and payable immediately, and upon any such declaration the same shall become and shall be immediately due and payable. If an Event of Default specified in clause (4) or clause (5) above occurs, the principal of and accrued and unpaid interest on all the Securities of that series shall automatically be immediately due and payable without any declaration or other act on the part of the Trustee or the holders of the Securities.

(c) At any time after the principal of (and premium, if any, on) and accrued and unpaid interest on the Securities of that series shall have been so declared due and payable, and before any judgment or decree for the payment of the moneys due shall have been obtained or entered as hereinafter provided, the holders of a majority in aggregate principal amount of the Securities of that series then Outstanding hereunder, by written notice to the Company and the Trustee, may rescind and annul such declaration and its consequences if: (i) the Company has paid or deposited with the Trustee a sum sufficient to pay all matured installments of interest upon all the Securities of that series and the principal of (and premium, if any, on) any and all Securities of that series that shall have become due otherwise than by acceleration (with interest upon such principal and premium, if any, and, to the extent that such payment is enforceable under applicable law, upon overdue installments of interest, at the rate per annum expressed in the Securities of that series to the date of such payment or deposit) and the amount payable to the Trustee under Section 7.06, and (ii) any and all Events of Default under the Indenture with respect to such series, other than the nonpayment of principal on (and premium, if any, on) and accrued and unpaid interest on Securities of that series that shall not have become due by their terms, shall have been remedied or waived as provided in Section 6.06.

No such rescission and annulment shall extend to or shall affect any subsequent default or impair any right consequent thereon.

(d) In case the Trustee shall have proceeded to enforce any right with respect to Securities of that series under this Indenture and such proceedings shall have been discontinued or abandoned because of such rescission or annulment or for any other reason or shall have been determined adversely to the Trustee, then and in every such case, subject to any determination in such proceedings, the Company and the Trustee shall be restored respectively to their former positions and rights hereunder, and all rights, remedies and powers of the Company and the Trustee shall continue as though no such proceedings had been taken.

Section 6.02 Collection of Indebtedness and Suits for Enforcement by Trustee.

(a) The Company covenants that if an Event of Default described in Section 6.01(a) or 6.01(b) shall have occurred with respect to the Securities of any series, the Company will pay to the Trustee, for the benefit of the holders of the Securities of that series, the whole amount that then shall have become due and payable on all such Securities for principal (and premium, if any) or interest, or both, as the case may be, with interest upon the overdue principal (and premium, if any) and (to the extent that payment of such interest is enforceable under applicable law) upon overdue installments of interest at the rate per annum expressed in the Securities of that series; and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, and the amount payable to the Trustee under Section 7.06.

(b) If the Company shall fail to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, shall be entitled and empowered to institute any action or proceedings at law or in equity for the collection of the sums so due and unpaid, and may prosecute any such action or proceeding to judgment or final decree, and may enforce any such judgment or final decree against the Company or other obligor upon the Securities of that series and collect the moneys adjudged or decreed to be payable in the manner provided by law or equity out of the property of the Company or other obligor upon the Securities of that series, wherever situated.

(c) In case of any receivership, insolvency, liquidation, bankruptcy, reorganization, readjustment, arrangement, composition or judicial proceedings affecting the Company, or its creditors or property, irrespective of whether the Trustee shall have made any demand pursuant to this Section 6.02, the Trustee shall have power to intervene in such proceedings and take any action therein that may be permitted by the court and shall (except as may be otherwise provided by law) be entitled to file such proofs of claim and other papers and documents as may be necessary or advisable in order to have the claims of the Trustee and of the holders of Securities of such series allowed for the entire amount due and payable by the Company under the Indenture at the date of institution of such proceedings and for any additional amount that may become due and payable by the Company after such date, and to collect and receive any moneys or other property payable or deliverable on any such claim, and to distribute the same after the deduction of the amount payable to the Trustee under Section 7.06; and any receiver, assignee or trustee in bankruptcy or reorganization is hereby authorized by each of the holders of Securities of such series to make such payments to the Trustee, and, in the event that the Trustee shall consent to the making of such payments directly to such Securityholders, to pay to the Trustee any amount due it under Section 7.06.

(d) All rights of action and of asserting claims under this Indenture, or under any of the terms established with respect to Securities of that series, may be enforced by the Trustee without the possession of any of such Securities, or the production thereof at any trial or other proceeding relative thereto, and any such suit or proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for payment to the Trustee of any amounts due under Section 7.06, be for the ratable benefit of the holders of the Securities of such series.

In case of an Event of Default hereunder, the Trustee may in its discretion proceed to protect and enforce the rights vested in it by this Indenture by such appropriate judicial proceedings as the Trustee shall deem most effectual to protect and enforce any of such rights, either at law or in equity or in bankruptcy or otherwise, whether for the specific enforcement of any covenant or agreement contained in the Indenture or in aid of the exercise of any power granted in this Indenture, or to enforce any other legal or equitable right vested in the Trustee by this Indenture or by law.

Nothing contained herein shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Securityholder any plan of reorganization, arrangement, adjustment or composition affecting the Securities of that series or the rights of any holder thereof or to authorize the Trustee to vote in respect of the claim of any Securityholder in any such proceeding.

#### Section 6.03 Application of Moneys Collected.

Any moneys or properties collected by the Trustee pursuant to this Article with respect to a particular series of Securities shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such moneys on account of principal (or premium, if any) or interest, upon presentation of the Securities of that series, and notation thereon of the payment, if only partially paid, and upon surrender thereof if fully paid:

**FIRST:** To the payment of all indebtedness of the Company to which such series of Securities is subordinated to the extent required by Section 7.06 and any subordination terms of the series specified as contemplated by Article 14;

**SECOND:** To the payment of the amounts then due and unpaid upon Securities of such series for principal (and premium, if any) and interest, in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the amounts due and payable on such Securities for principal (and premium, if any) and interest, respectively; and

**THIRD:** To the payment of the remainder, if any, to the Company or any other Person lawfully entitled thereto.

#### Section 6.04 Limitation on Suits.

No holder of any Security of any series shall have any right by virtue or by availing of any provision of this Indenture to institute any suit, action or proceeding in equity or at law upon or under or with respect to this Indenture or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless (i) such holder previously shall have given to the Trustee written notice of an Event of Default and of the continuance thereof with respect to the Securities of such series specifying such Event of Default, as hereinbefore provided; (ii) the holders of not less than 25% in aggregate principal amount of the Securities of such series then Outstanding shall have made written request upon the Trustee to institute such action, suit or proceeding in its own name as Trustee hereunder; (iii) such holder or holders shall have offered to the Trustee such indemnity reasonably satisfactory to it as it may require against the costs, expenses, claims and liabilities to be incurred therein or thereby; (iv) the Trustee for 90 days after its receipt of such notice, request and offer of indemnity, shall have failed to institute any such action, suit or proceeding and (v) during such 90 day period, the holders of a majority in principal amount of the Securities of that series do not give the Trustee a direction inconsistent with the request.

Notwithstanding anything contained herein to the contrary or any other provisions of this Indenture, the right of any holder of any Security to receive payment of the principal of (and premium, if any) and interest on such Security, as therein provided, on or after the respective due dates expressed in such Security (or in the case of redemption, on the redemption date), or to institute suit for the enforcement of any such payment on or after such respective dates or redemption date, shall not be impaired or affected without the consent of such holder and by accepting a Security hereunder it is expressly understood, intended and covenanted by the taker and holder of every Security of such series with every other such taker and holder and the Trustee, that no one or more holders of Securities of such series shall have any right in any manner whatsoever by virtue or by availing of any provision of this Indenture to affect, disturb or prejudice the rights of the holders of any other of such Securities, or to obtain or seek to obtain priority over or preference to any other such holder, or to enforce any right under this Indenture (it being understood that the Trustee does not have an affirmative duty to ascertain whether or not such actions or forbearances are unduly prejudicial to such holders), except in the manner herein provided and for the equal, ratable and common benefit of all holders of Securities of such series. For the protection and enforcement of the provisions of this Section, each and every Securityholder and the Trustee shall be entitled to such relief as can be given either at law or in equity.

Section 6.05 Rights and Remedies Cumulative; Delay or Omission Not Waiver.

(a) Except as otherwise provided in Section 2.07, all powers and remedies given by this Article to the Trustee or to the Securityholders shall, to the extent permitted by law, be deemed cumulative and not exclusive of any other powers and remedies available to the Trustee or the holders of the Securities, by judicial proceedings or otherwise, to enforce the performance or observance of the covenants and agreements contained in this Indenture or otherwise established with respect to such Securities.

(b) No delay or omission of the Trustee or of any holder of any of the Securities to exercise any right or power accruing upon any Event of Default occurring and continuing as aforesaid shall impair any such right or power, or shall be construed to be a waiver of any such default or an acquiescence therein; and, subject to the provisions of Section 6.04, every power and remedy given by this Article or by law to the Trustee or the Securityholders may be exercised from time to time, and as often as shall be deemed expedient, by the Trustee or by the Securityholders.

Section 6.06 Control by Securityholders.

The holders of a majority in aggregate principal amount of the Securities of any series at the time Outstanding, determined in accordance with Section 8.04, shall 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 such series; *provided, however*, that such direction shall not be in conflict with any rule of law or with this Indenture or subject the Trustee in its sole discretion to personal liability. The Trustee shall have the right to decline to follow any such direction if the Trustee in good faith shall determine that the proceeding so directed, subject to the Trustee's duties under the Trust Indenture Act, would involve the Trustee in personal liability or might be unduly prejudicial to the Securityholders not involved in the proceeding. Prior to taking any action under this Indenture, the Trustee shall be entitled to indemnity or security satisfactory to it against loss, liability or expense that may be caused by taking such action. The holders of a majority in aggregate principal amount of the Securities of any series at the time Outstanding affected thereby, determined in accordance with Section 8.04, may on behalf of the holders of all of the Securities of such series waive any past default in the performance of any of the covenants contained herein or established pursuant to Section 2.01 with respect to such series and its consequences, except a default in the payment of the principal of, or premium, if any, or interest on, any of the Securities of that series as and when the same shall become due by the terms of such Securities otherwise than by acceleration (unless such default has been cured and a sum sufficient to pay all matured installments of interest and principal and any premium has been deposited with the Trustee (in accordance with Section 6.01(c)). Upon any such waiver, the default covered thereby shall be deemed to be cured for all purposes of this Indenture and the Company, the Trustee and the holders of the Securities of such series shall be restored to their former positions and rights hereunder, respectively; but no such waiver shall extend to any subsequent or other default or impair any right consequent thereon.

Section 6.07 Undertaking to Pay Costs.

All parties to this Indenture agree, and each holder of any Securities by such holder's acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Trustee, to any suit instituted by any Securityholder, or group of Securityholders, holding more than 10% in aggregate principal amount of the Outstanding Securities of any series, or to any suit instituted by any Securityholder for the enforcement of the payment of the principal of (or premium, if any) or interest on any Security of such series, on or after the respective due dates expressed in such Security or established pursuant to this Indenture.

**ARTICLE 7**  
**CONCERNING THE TRUSTEE**

Section 7.01 Certain Duties and Responsibilities of Trustee.

(a) The Trustee, prior to the occurrence of an Event of Default with respect to the Securities of a series and after the curing of all Events of Default with respect to the Securities of that series that may have occurred, shall undertake to perform with respect to the Securities of such series such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants shall be read into this Indenture against the Trustee. In case an Event of Default with respect to the Securities of a series has occurred (that has not been cured or waived), the Trustee shall exercise with respect to Securities of that series such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.

(b) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(1) prior to the occurrence of an Event of Default with respect to the Securities of a series and after the curing or waiving of all such Events of Default with respect to that series that may have occurred:

(A) the duties and obligations of the Trustee shall with respect to the Securities of such series be determined solely by the express provisions of this Indenture, and the Trustee shall not be liable with respect to the Securities of such series except for the performance of such duties and obligations as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(B) in the absence of willful misconduct on the part of the Trustee, the Trustee may with respect to the Securities of such series conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions that by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture (but need not confirm or investigate the accuracy of mathematical calculations or other facts stated therein);

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer or Responsible Officers of the Trustee, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(3) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the holders of not less than a majority in principal amount of the Securities of any series at the time Outstanding relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee under this Indenture with respect to the Securities of that series; and

(4) none of the provisions contained in this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur personal or financial liability in the performance of any of its duties or in the exercise of any of its rights or powers if there is reasonable ground for believing that the repayment of such funds or liability is not reasonably assured to it under the terms of this Indenture or adequate indemnity against such risk is not reasonably assured to it.

Section 7.02 Certain Rights of Trustee.

Except as otherwise provided in Section 7.01:

(a) The Trustee may rely and shall be protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, bond, security or other paper or document or other evidence of indebtedness believed by it to be genuine and to have been signed or presented by the proper party or parties. The Trustee need not investigate any fact or matter stated in the document. The Trustee shall receive and retain financial reports and statements of the Company to the extent provided herein, but shall have no duty to review or analyze such reports or statements to determine compliance with covenants or other obligations of the Company;



(b) Any request, direction, order or demand of the Company mentioned herein shall be sufficiently evidenced by a Board Resolution or an instrument signed in the name of the Company by any authorized Officer of the Company (unless other evidence in respect thereof is specifically prescribed herein);

(c) The Trustee may consult with counsel of its selection and the advice of such counsel or, if requested, any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken or suffered or omitted hereunder in good faith and in reliance thereon;

(d) The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request, order or direction of any of the Securityholders pursuant to the provisions of this Indenture, unless such Securityholders shall have offered (and if requested, provided) to the Trustee security or indemnity satisfactory to it against the costs, expenses, claims and liabilities that may be incurred therein or thereby;

(e) The Trustee shall not be liable for any action taken or omitted to be taken by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture;

(f) The Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, approval, bond, security, or other papers or documents or other evidence of indebtedness, unless requested in writing so to do by the holders of not less than a majority in principal amount of the Outstanding Securities of the particular series affected thereby (determined as provided in Section 8.04); *provided, however*, that if the payment within a reasonable time to the Trustee of the costs, expenses, claims or liabilities likely to be incurred by it in the making of such investigation is, in the opinion of the Trustee, not reasonably assured to the Trustee by the security afforded to it by the terms of this Indenture, the Trustee may require indemnity or security satisfactory to it against such costs, expenses, claims or liabilities as a condition to so proceeding. The reasonable expense of every such examination shall be paid by the Company or, if paid by the Trustee, shall be repaid by the Company upon demand;

(g) The Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder;

(h) In no event shall the Trustee be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances;

(i) In no event shall the Trustee be responsible or liable for special, punitive, indirect, or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit) irrespective of whether the Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action;

(j) The permissive rights of the Trustee enumerated herein shall not be construed as duties;

(k) The Trustee may request that the Company deliver a certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture; and

(l) The Trustee shall not be required to give any bond or surety in respect of the performance of its powers and duties hereunder.

In addition, the Trustee shall not be deemed to have knowledge of any Default or Event of Default until a Responsible Officer of the Trustee shall have received written notification in the manner set forth in this Indenture, and such notice references the Securities and this Indenture or a Responsible Officer of the Trustee shall have obtained actual knowledge.

Section 7.03 Trustee Not Responsible for Recitals or Issuance or Securities.

(a) The recitals contained herein and in the Securities shall be taken as the statements of the Company, and the Trustee assumes no responsibility for the correctness of the same.

(b) The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities.

(c) The Trustee shall not be accountable for the use or application by the Company of any of the Securities or of the proceeds of such Securities, or for the use or application of any moneys paid over by the Trustee in accordance with any provision of this Indenture or established pursuant to Section 2.01, or for the use or application of any moneys received by any paying agent other than the Trustee.

Section 7.04 May Hold Securities.

The Trustee or any paying agent or Security Registrar, in its individual or any other capacity, may become the owner or pledgee of Securities with the same rights it would have if it were not Trustee, paying agent or Security Registrar.

Section 7.05 Moneys Held in Trust.

Subject to the provisions of Section 11.05, all moneys received by the Trustee shall, until used or applied as herein provided, be held in trust for the purposes for which they were received, but need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any moneys received by it hereunder except such as it may agree in writing with the Company to pay thereon.

Section 7.06 Compensation and Reimbursement.

(a) The Company covenants and agrees to pay to the Trustee, and the Trustee shall be entitled to, such compensation (which shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust) as the Company and the Trustee may from time to time agree in writing, for all services rendered by it in the execution of the trusts hereby created and in the exercise and performance of any of the powers and duties hereunder of the Trustee, and, except as otherwise expressly provided herein, the Company will pay or reimburse the Trustee upon its request for all reasonable and documented expenses, disbursements and advances incurred or made by the Trustee in accordance with any of the provisions of this Indenture (including the reasonable and documented fees and the expenses and disbursements of its counsel and of all Persons not regularly in its employ), except any such expense, disbursement or advance as may arise from its negligence or willful misconduct. The Company also covenants to indemnify the Trustee (and its officers, agents, directors and employees) for, and to hold it harmless against, any documented loss, liability or expense, including reasonable and documented attorneys' fees, incurred without negligence or willful misconduct on the part of the Trustee and arising out of or in connection with the acceptance or administration of this trust, including the reasonable and documented costs and expenses of defending itself against any claim of liability in the premises (whether asserted by the Company, or any holder or any other Person) or liability in connection with the exercise or performance of any of its powers or duties hereunder, or in connection with enforcing the provisions of this Section.

(b) The obligations of the Company under this Section to compensate and indemnify the Trustee and to pay or reimburse the Trustee for reasonable expenses, disbursements and advances shall constitute indebtedness of the Company to which the Securities are subordinated. Such additional indebtedness shall be secured by a lien prior to that of the Securities upon all property and funds held or collected by the Trustee as such, except funds held in trust for the benefit of the holders of particular Securities.

(c) To ensure the Company's payment obligations in this Section, the Trustee shall have a lien prior to the Securities on all funds or property held or collected by the Trustee, except that held in trust to pay principal of, premium, if any, or interest on particular Securities. When the Trustee incurs expenses or renders services in connection with an Event of Default specified in Section 6.01(a)(4) or (5), the expenses (including the reasonable fees and expenses of its counsel) and the compensation for services in connection therewith are to constitute expenses of administration under any Bankruptcy Law. The provisions of this Section 7.06 shall survive the termination of this Indenture and the earlier resignation or removal of the Trustee.

Section 7.07 Reliance on Officer's Certificate or Opinion of Counsel.

Except as otherwise provided in Section 7.01, whenever in the administration of the provisions of this Indenture the Trustee shall deem it reasonably necessary or desirable that a matter be proved or established prior to taking or suffering or omitting to take any action hereunder, such matter (unless other evidence in respect thereof be herein specifically prescribed) may, in the absence of negligence or willful misconduct on the part of the Trustee, be deemed to be conclusively proved and established by an Officer's Certificate and Opinion of Counsel delivered to the Trustee and such certificate and opinion, in the absence of negligence or willful misconduct on the part of the Trustee, shall be full warrant to the Trustee for any action taken, suffered or omitted to be taken by it under the provisions of this Indenture upon the faith thereof.

Section 7.08 Disqualification; Conflicting Interests.

If the Trustee has or shall acquire any "conflicting interest" within the meaning of Section 310(b) of the Trust Indenture Act, the Trustee and the Company shall in all respects comply with the provisions of Section 310(b) of the Trust Indenture Act.

Section 7.09 Corporate Trustee Required; Eligibility.

There shall at all times be a Trustee with respect to the Securities issued hereunder which shall at all times be a corporation organized and doing business under the laws of the United States of America or any state or territory thereof or of the District of Columbia, or a corporation or other Person permitted to act as trustee by the Commission, authorized under such laws to exercise corporate trust powers, having a combined capital and surplus of at least fifty million U.S. dollars (\$50,000,000), and subject to supervision or examination by federal, state, territorial, or District of Columbia authority.

If such corporation or other Person publishes reports of condition at least annually, pursuant to law or to the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such corporation or other Person shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. The Company may not, nor may any Person directly or indirectly controlling, controlled by, or under common control with the Company, serve as Trustee. In case at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section, the Trustee shall resign immediately in the manner and with the effect specified in Section 7.10.

Section 7.10 Resignation and Removal; Appointment of Successor.

(a) The Trustee or any successor hereafter appointed may at any time resign with respect to the Securities of one or more series by giving written notice thereof to the Company and by transmitting notice of resignation by electronic mail, or by first class postage prepaid mail, to the Securityholders of such series, as their names and addresses appear upon the Security Register. Upon receiving such notice of resignation, the Company shall promptly appoint a successor trustee with respect to Securities of such series by written instrument, in duplicate, executed by order of the Board of Directors, one copy of which instrument shall be delivered to the resigning Trustee and one copy to the successor trustee. If no successor trustee shall have been so appointed and have accepted appointment within 30 days after the mailing of such notice of resignation, the resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor trustee with respect to Securities of such series, or any Securityholder of that series who has been a bona fide holder of a Security or Securities for at least six months may on behalf of himself and all others similarly situated, petition any such court for the appointment of a successor trustee. Such court may thereupon after such notice, if any, as it may deem proper and prescribe, appoint a successor trustee.

(b) In case at any time any one of the following shall occur:

(i) the Trustee shall fail to comply with the provisions of Section 7.08 after written request therefor by the Company or by any Securityholder who has been a bona fide holder of a Security or Securities for at least six months; or

(ii) the Trustee shall cease to be eligible in accordance with the provisions of Section 7.09 and shall fail to resign after written request therefor by the Company or by any such Securityholder; or

(iii) the Trustee shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or commence a voluntary bankruptcy proceeding, or a receiver of the Trustee or of its property shall be appointed or consented to, or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation;

then, in any such case, the Company may remove the Trustee with respect to all Securities and appoint a successor trustee by written instrument, in duplicate, executed by order of the Board of Directors, one copy of which instrument shall be delivered to the Trustee so removed and one copy to the successor trustee, or any Securityholder who has been a bona fide holder of a Security or Securities for at least six months may, on behalf of that holder and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor trustee. Such court may thereupon after such notice, if any, as it may deem proper and prescribe, remove the Trustee and appoint a successor trustee.

(c) The holders of a majority in aggregate principal amount of the Securities of any series at the time Outstanding may at any time remove the Trustee with respect to such series by so notifying the Trustee and the Company and may appoint a successor Trustee for such series with the consent of the Company.

(d) Any resignation or removal of the Trustee and appointment of a successor trustee with respect to the Securities of a series pursuant to any of the provisions of this Section shall become effective upon acceptance of appointment by the successor trustee as provided in Section 7.11.

(e) Any successor trustee appointed pursuant to this Section may be appointed with respect to the Securities of one or more series or all of such series, and at any time there shall be only one Trustee with respect to the Securities of any particular series.

Section 7.11 Acceptance of Appointment By Successor.

(a) In case of the appointment hereunder of a successor trustee with respect to all Securities, every such successor trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on the request of the Company or the successor trustee, such retiring Trustee shall, upon full payment of any amount then due it pursuant to Section 7.06, execute and deliver an instrument transferring to such successor trustee all the rights, powers, and trusts of the retiring Trustee and shall duly assign, transfer and deliver to such successor trustee all property and money held by such retiring Trustee hereunder.

(b) In case of the appointment hereunder of a successor trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto wherein each successor trustee shall accept such appointment and which (i) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor trustee relates, (ii) shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (iii) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust, that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee and that no Trustee shall be responsible for any act or failure to act on the part of any other Trustee hereunder; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein, such retiring Trustee shall with respect to the Securities of that or those series to which the appointment of such successor trustee relates have no further responsibility for the exercise of rights and powers or for the performance of the duties and obligations vested in the Trustee under this Indenture, and each such successor trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor trustee relates; but, on request of the Company or any successor trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor trustee, to the extent contemplated by such supplemental indenture, the property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor trustee relates.

(c) Upon request of any such successor trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor trustee all such rights, powers and trusts referred to in paragraph (a) or (b) of this Section, as the case may be.

(d) No successor trustee shall accept its appointment unless at the time of such acceptance such successor trustee shall be qualified and eligible under this Article.

(e) Upon acceptance of appointment by a successor trustee as provided in this Section, the Company shall transmit notice of the succession of such trustee hereunder by mail, first class postage prepaid, to the Securityholders, as their names and addresses appear upon the Security Register. If the Company fails to transmit such notice within ten days after acceptance of appointment by the successor trustee, the successor trustee shall cause such notice to be transmitted at the expense of the Company.

#### Section 7.12 Merger, Conversion, Consolidation or Succession to Business.

Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to the corporate trust business of the Trustee, including the administration of the trust created by this Indenture, shall be the successor of the Trustee hereunder, *provided* that such corporation shall be qualified under the provisions of Section 7.08 and eligible under the provisions of Section 7.09, without the execution or filing of any paper or any further act on the part of any of the parties hereto, anything herein to the contrary notwithstanding. In case any Securities shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities.

#### Section 7.13 Preferential Collection of Claims Against the Company.

The Trustee shall comply with Section 311(a) of the Trust Indenture Act, excluding any creditor relationship described in Section 311(b) of the Trust Indenture Act. A Trustee who has resigned or been removed shall be subject to Section 311(a) of the Trust Indenture Act to the extent included therein.

Section 7.14 Notice of Default.

If any Event of Default occurs and is continuing and if such Event of Default is actually known to a Responsible Officer of the Trustee, the Trustee shall send to each Securityholder in the manner and to the extent provided in Section 313(c) of the Trust Indenture Act notice of the Event of Default within the later of 90 days after it occurs and 30 days after it is actually known to a Responsible Officer of the Trustee or written notice of it is received by the Trustee, unless such Event of Default has been cured; *provided, however*, that, except in the case of a default in the payment of the principal of (or premium, if any) or interest on any Security, the Trustee shall be protected in withholding such notice if and so long as it in good faith determines that the withholding of such notice is in the interest of the Securityholders.

**ARTICLE 8**  
**CONCERNING THE SECURITYHOLDERS**

Section 8.01 Evidence of Action by Securityholders.

Whenever in this Indenture it is *provided* that the holders of a majority or specified percentage in aggregate principal amount of the Securities of a particular series may take any action (including the making of any demand or request, the giving of any notice, consent or waiver or the taking of any other action), the fact that at the time of taking any such action the holders of such majority or specified percentage of that series have joined therein may be evidenced by any instrument or any number of instruments of similar tenor executed by such holders of Securities of that series in person or by agent or proxy appointed in writing.

If the Company shall solicit from the Securityholders of any series any request, demand, authorization, direction, notice, consent, waiver or other action, the Company may, at its option, as evidenced by an Officer's Certificate, fix in advance a record date for such series for the determination of Securityholders entitled to give such request, demand, authorization, direction, notice, consent, waiver or other action, but the Company shall have no obligation to do so. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, waiver or other action may be given before or after the record date, but only the Securityholders of record at the close of business on the record date shall be deemed to be Securityholders for the purposes of determining whether Securityholders of the requisite proportion of Outstanding Securities of that series have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, waiver or other action, and for that purpose the Outstanding Securities of that series shall be computed as of the record date; *provided, however*, that no such authorization, agreement or consent by such Securityholders on the record date shall be deemed effective unless it shall become effective pursuant to the provisions of this Indenture not later than six months after the record date.

Section 8.02 Proof of Execution by Securityholders.

Subject to the provisions of Section 7.01, proof of the execution of any instrument by a Securityholder (such proof will not require notarization) or his agent or proxy and proof of the holding by any Person of any of the Securities shall be sufficient if made in the following manner:

(a) The fact and date of the execution by any such Person of any instrument may be proved in any reasonable manner acceptable to the Trustee.

(b) The ownership of Securities shall be proved by the Security Register of such Securities or by a certificate of the Security Registrar thereof. The Trustee may require such additional proof of any matter referred to in this Section as it shall deem necessary.

Section 8.03 Who May be Deemed Owners.

Prior to the due presentment for registration of transfer of any Security, the Company, the Trustee, any paying agent and any Security Registrar may deem and treat the Person in whose name such Security shall be registered upon the books of the Security Registrar as the absolute owner of such Security (whether or not such Security shall be overdue and notwithstanding any notice of ownership or writing thereon made by anyone other than the Security Registrar) for the purpose of receiving payment of or on account of the principal of, premium, if any, and (subject to Section 2.03) interest on such Security and for all other purposes; and neither the Company nor the Trustee nor any paying agent nor any Security Registrar shall be affected by any notice to the contrary.

Section 8.04 Certain Securities Owned by Company Disregarded.

In determining whether the holders of the requisite aggregate principal amount of Securities of a particular series have concurred in any direction, consent, demand, authorization, notice or waiver under this Indenture, the Securities of that series that are owned by the Company or any other obligor on the Securities of that series or by any Person directly or indirectly controlling or controlled by or under common control with the Company or any other obligor on the Securities of that series shall be disregarded and deemed not to be Outstanding for the purpose of any such determination, except that for the purpose of determining whether the Trustee shall be protected in relying on any such direction, consent or waiver, only Securities of such series that a Responsible Officer of the Trustee actually knows are so owned shall be so disregarded. The Securities so owned that have been pledged in good faith may be regarded as Outstanding for the purposes of this Section, if the pledgee shall establish to the satisfaction of the Trustee the pledgee's right so to act with respect to such Securities and that the pledgee is not a Person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company or any such other obligor. In case of a dispute as to such right, any decision by the Trustee taken upon the advice of counsel shall be full protection to the Trustee.

Section 8.05 Actions Binding on Future Securityholders.

At any time prior to (but not after) the evidencing to the Trustee, as provided in Section 8.01, of the taking of any action by the holders of the majority or percentage in aggregate principal amount of the Securities of a particular series specified in this Indenture in connection with such action, any holder of a Security of that series that is shown by the evidence to be included in the Securities the holders of which have consented to such action may, by filing written notice with the Trustee, and upon proof of holding as provided in Section 8.02, revoke such action so far as concerns such Security. Except as aforesaid any such action taken by the holder of any Security shall be conclusive and binding upon such holder and upon all future holders and owners of such Security, and of any Security issued in exchange therefor, on registration of transfer thereof or in place thereof, irrespective of whether or not any notation in regard thereto is made upon such Security. Any action taken by the holders of the majority or percentage in aggregate principal amount of the Securities of a particular series specified in this Indenture in connection with such action shall be conclusively binding upon the Company, the Trustee and the holders of all the Securities of that series.

**ARTICLE 9  
SUPPLEMENTAL INDENTURES**

Section 9.01 Supplemental Indentures Without the Consent of Securityholders.

In addition to any supplemental indenture otherwise authorized by this Indenture, the Company and the Trustee may from time to time and at any time enter into an indenture or indentures supplemental hereto (which shall conform to the provisions of the Trust Indenture Act as then in effect), without the consent of the Securityholders at any time Outstanding, for one or more of the following purposes:

- (a) to cure any ambiguity, defect, or inconsistency herein or in the Securities of any series;
- (b) to comply with Article 10;
- (c) to provide for uncertificated Securities in addition to or in place of certificated Securities;
- (d) to add to the covenants, restrictions, conditions or provisions relating to the Company for the benefit of the holders of all or any series of Securities (and if such covenants, restrictions, conditions or provisions are to be for the benefit of less than all series of Securities, stating that such covenants, restrictions, conditions or provisions are expressly being included solely for the benefit of such series), 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 herein conferred upon the Company;

- (e) 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 Securities, as herein set forth;
- (f) to make any change that does not adversely affect the rights of any Securityholder in any material respect;
- (g) to provide for the issuance of and establish the form and terms and conditions of the Securities of any series as provided in Section 2.01, to establish the form of any certifications required to be furnished pursuant to the terms of this Indenture or any series of Securities, or to add to the rights of the holders of any series of Securities;
- (h) to evidence and provide for the acceptance of appointment hereunder by a successor trustee or to appoint a separate trustee with respect to any series; or
- (i) to comply with any requirements of the Commission or any successor in connection with the qualification of this Indenture under the Trust Indenture Act.

The Trustee is hereby authorized to join with the Company in the execution of any such supplemental indenture, and to make any further appropriate agreements and stipulations that may be therein contained, but the Trustee shall not be obligated to enter into any such supplemental indenture that affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

Any supplemental indenture authorized by the provisions of this Section may be executed by the Company and the Trustee without the consent of the holders of any of the Securities at the time Outstanding, notwithstanding any of the provisions of Section 9.02.

#### Section 9.02 Supplemental Indentures With Consent of Securityholders.

With the consent (evidenced as provided in Section 8.01) of the holders of not less than a majority in aggregate principal amount of the Securities of each series affected by such supplemental indenture or indentures at the time Outstanding, the Company, when authorized by a Board Resolution, and the Trustee may from time to time and at any time enter into an indenture or indentures supplemental hereto (which shall conform to the provisions of the Trust Indenture Act as then in effect) for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of any supplemental indenture or of modifying in any manner not covered by Section 9.01 the rights of the holders of the Securities of such series under this Indenture; *provided, however*, that no such supplemental indenture shall, without the consent of the holders of each Security then Outstanding and affected thereby, (a) extend the fixed maturity of any Securities of any series, or reduce the principal amount thereof, or reduce the rate or extend the time of payment of interest thereon, or reduce any premium payable upon the redemption thereof or (b) reduce the aforesaid percentage of Securities, the holders of which are required to consent to any such supplemental indenture.

It shall not be necessary for the consent of the Securityholders of any series affected thereby under this Section to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such consent shall approve the substance thereof. The Trustee shall not be obligated to enter into any such supplemental indenture that affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

#### Section 9.03 Effect of Supplemental Indentures.

Upon the execution of any supplemental indenture pursuant to the provisions of this Article or of Section 10.01, this Indenture shall, with respect to such series only, be and be deemed to be modified and amended in accordance therewith and the respective rights, limitations of rights, obligations, duties and immunities under this Indenture of the Trustee, the Company and the holders of Securities of the series affected thereby shall thereafter be determined, exercised and enforced hereunder subject in all respects to such modifications and amendments, and all the terms and conditions of any such supplemental indenture shall be and be deemed to be part of the terms and conditions of this Indenture for any and all purposes with respect to such series.



Section 9.04 Securities Affected by Supplemental Indentures.

Securities of any series affected by a supplemental indenture, authenticated and delivered after the execution of such supplemental indenture pursuant to the provisions of this Article or of Section 10.01, may bear a notation in form approved by the Company, provided such form meets the requirements of any securities exchange upon which such series may be listed, as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities of that series so modified as to conform, in the opinion of the Board of Directors, to any modification of this Indenture contained in any such supplemental indenture may be prepared by the Company, authenticated by the Trustee and delivered in exchange for the Securities of that series then Outstanding.

Section 9.05 Execution of Supplemental Indentures.

Upon the request of the Company, accompanied by its Board Resolutions authorizing the execution of any such supplemental indenture, and upon the filing with the Trustee of evidence of the consent of Securityholders required to consent thereto as aforesaid, the Trustee shall join with the Company in the execution of such supplemental indenture unless such supplemental indenture affects the Trustee's own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion but shall not be obligated to enter into such supplemental indenture. The Trustee shall receive an Officer's Certificate and an Opinion of Counsel as conclusive evidence that any supplemental indenture executed pursuant to this Article is authorized or permitted by the terms of this Article and that all conditions precedent to the execution of the supplemental indenture have been complied with and with respect to such Opinion of Counsel, that such supplemental indenture is the legal, valid and binding obligation of the Company, enforceable against each of them in accordance with its terms, subject to customary exceptions and qualifications.

Promptly after the execution by the Company and the Trustee of any supplemental indenture pursuant to the provisions of this Article, the Company shall transmit by electronic mail, or by first class mail, postage prepaid, a notice, setting forth in general terms the substance of such supplemental indenture, to the Securityholders of all series affected thereby as their names and addresses appear upon the Security Register. Any failure of the Company to mail, or cause the mailing of, such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture.

**ARTICLE 10**  
**SUCCESSOR ENTITY**

Section 10.01 Company May Consolidate, Etc.

Nothing contained in this Indenture shall prevent any consolidation or merger of the Company with or into any other Person (whether or not affiliated with the Company) or successive consolidations or mergers in which the Company or its successor or successors shall be a party or parties, or shall prevent any sale, conveyance, transfer or other disposition of the property of the Company or its successor or successors as an entirety, or substantially as an entirety, to any other corporation (whether or not affiliated with the Company or its successor or successors) authorized to acquire and operate the same; *provided, however*, (a) the Company hereby covenants and agrees that, upon any such consolidation or merger (in each case, if the Company is not the survivor of such transaction), sale, conveyance, transfer or other disposition, the due and punctual payment of the principal of (premium, if any) and interest on all of the Securities of all series in accordance with the terms of each series, according to their tenor, and the due and punctual performance and observance of all the covenants and conditions of this Indenture with respect to each series or established with respect to such series pursuant to Section 2.01 to be kept or performed by the Company shall be expressly assumed, by supplemental indenture (which shall conform to the provisions of the Trust Indenture Act, as then in effect) executed and delivered to the Trustee by the entity formed by such consolidation, or into which the Company shall have been merged, or by the entity which shall have acquired such property and (b) in the event that the Securities of any series then Outstanding are convertible into or exchangeable for shares of common stock or other securities of the Company, such entity shall, by such supplemental indenture, make provision so that the Securityholders of Securities of that series shall thereafter be entitled to receive upon conversion or exchange of such Securities the number of securities or property to which a holder of the number of shares of common stock or other securities of the Company deliverable upon conversion or exchange of those Securities would have been entitled had such conversion or exchange occurred immediately prior to such consolidation, merger, sale, conveyance, transfer or other disposition. If the Company is not the surviving entity of any such transaction, the Company or the continuing entity agrees to deliver to the Trustee an Officer's Certificate and Opinion of Counsel stating that the transaction and the supplemental indenture complies with this Section 10.01 and that all conditions precedent herein relating to the transaction have been satisfied.

Section 10.02 Successor Entity Substituted.

(a) In case of any such consolidation, merger, sale, conveyance, transfer or other disposition and upon the assumption by the successor entity by supplemental indenture, executed and delivered to the Trustee, of the obligations set forth under Section 10.01 on all of the Securities of all series Outstanding, such successor entity shall succeed to and be substituted for the Company with the same effect as if it had been named as the Company herein, and thereupon the predecessor corporation shall be relieved of all obligations and covenants under this Indenture and the Securities.

(b) In case of any such consolidation, merger, sale, conveyance, transfer or other disposition, such changes in phraseology and form (but not in substance) may be made in the Securities thereafter to be issued as may be appropriate.

(c) Nothing contained in this Article shall require any action by the Company in the case of a consolidation or merger of any Person into the Company where the Company is the survivor of such transaction, or the acquisition by the Company, by purchase or otherwise, of all or any part of the property of any other Person (whether or not affiliated with the Company).

**ARTICLE 11**  
**SATISFACTION AND DISCHARGE**

Section 11.01 Satisfaction and Discharge of Indenture.

If at any time: (a) the Company shall have delivered to the Trustee for cancellation all Securities of a series theretofore authenticated and not delivered to the Trustee for cancellation (other than any Securities that shall have been destroyed, lost or stolen and that shall have been replaced or paid as provided in Section 2.07 and Securities for whose payment money or Governmental Obligations have theretofore been deposited in trust or segregated and held in trust by the Company and thereupon repaid to the Company or discharged from such trust, as provided in Section 11.05); or (b) all such Securities of a particular series not theretofore delivered to the Trustee for cancellation shall have become due and payable, or are by their terms to become due and payable within one year or are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption, and the Company shall deposit or cause to be deposited with the Trustee as trust funds the entire amount in moneys or Governmental Obligations or a combination thereof, sufficient in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay at maturity or upon redemption all Securities of that series not theretofore delivered to the Trustee for cancellation, including principal (and premium, if any) and interest due or to become due to such date of maturity or date fixed for redemption, as the case may be, and if the Company shall also pay or cause to be paid all other sums payable hereunder with respect to such series by the Company then this Indenture shall thereupon cease to be of further effect with respect to such series except for the provisions of Sections 2.03, 2.05, 2.07, 4.01, 4.02, 4.03 and 7.10, that shall survive until the date of maturity or redemption date, as the case may be, and Sections 7.06 and 11.05, that shall survive to such date and thereafter, and the Trustee, on demand of the Company and at the cost and expense of the Company shall execute such instruments reasonably requested by the Company acknowledging satisfaction of and discharging this Indenture with respect to such series.

Section 11.02 Discharge of Obligations.

If at any time all such Securities of a particular series not heretofore delivered to the Trustee for cancellation or that have not become due and payable as described in Section 11.01 shall have been paid by the Company by depositing irrevocably with the Trustee as trust funds moneys or an amount of Governmental Obligations sufficient to pay at maturity or upon redemption all such Securities of that series not theretofore delivered to the Trustee for cancellation, including principal (and premium, if any) and interest due or to become due to such date of maturity or date fixed for redemption, as the case may be, and if the Company shall also pay or cause to be paid all other sums payable hereunder by the Company with respect to such series, then after the date such moneys or Governmental Obligations, as the case may be, are deposited with the Trustee the obligations of the Company under this Indenture with respect to such series shall cease to be of further effect except for the provisions of Sections 2.03, 2.05, 2.07, 4.01, 4.02, 4.03, 7.06, 7.10 and 11.05 hereof that shall survive until such Securities shall mature and be paid.

Thereafter, Sections 7.06 and 11.05 shall survive.

Section 11.03 Deposited Moneys to be Held in Trust.

All moneys or Governmental Obligations deposited with the Trustee pursuant to Sections 11.01 or 11.02 shall be held in trust and shall be available for payment as due, either directly or through any paying agent (including the Company acting as its own paying agent), to the holders of the particular series of Securities for the payment or redemption of which such moneys or Governmental Obligations have been deposited with the Trustee.

Section 11.04 Payment of Moneys Held by Paying Agents.

In connection with the satisfaction and discharge of this Indenture all moneys or Governmental Obligations then held by any paying agent under the provisions of this Indenture shall, upon demand of the Company, be paid to the Trustee and thereupon such paying agent shall be released from all further liability with respect to such moneys or Governmental Obligations.

Section 11.05 Repayment to Company.

Any moneys or Governmental Obligations deposited with any paying agent or the Trustee, or then held by the Company, in trust for payment of principal of or premium, if any, or interest on the Securities of a particular series that are not applied but remain unclaimed by the holders of such Securities for at least two years after the date upon which the principal of (and premium, if any) or interest on such Securities shall have respectively become due and payable, or such other shorter period set forth in applicable escheat or abandoned or unclaimed property law, shall be repaid to the Company on May 31 of each year or upon the Company's request or (if then held by the Company) shall be discharged from such trust; and thereupon the paying agent and the Trustee shall be released from all further liability with respect to such moneys or Governmental Obligations, and the holder of any of the Securities entitled to receive such payment shall thereafter, as a general creditor, look only to the Company for the payment thereof.

**ARTICLE 12  
IMMUNITY OF INCORPORATORS, STOCKHOLDERS, OFFICERS  
AND DIRECTORS**

Section 12.01 No Recourse.

No recourse under or upon any obligation, covenant or agreement of this Indenture, or of any Security, or for any claim based thereon or otherwise in respect thereof, shall be had against any incorporator, stockholder, officer or director, past, present or future as such, of the Company or of any predecessor or successor corporation, either directly or through the Company or any such predecessor or successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly understood that this Indenture and the obligations issued hereunder are solely corporate obligations, and that no such personal liability whatever shall attach to, or is or shall be incurred by, the incorporators, stockholders, officers or directors as such, of the Company or of any predecessor or successor corporation, or any of them, because of the creation of the indebtedness hereby authorized, or under or by reason of the obligations, covenants or agreements contained in this Indenture or in any of the Securities or implied therefrom; and that any and all such personal liability of every name and nature, either at common law or in equity or by constitution or statute, of, and any and all such rights and claims against, every such incorporator, stockholder, officer or director as such, because of the creation of the indebtedness hereby authorized, or under or by reason of the obligations, covenants or agreements contained in this Indenture or in any of the Securities or implied therefrom, are hereby expressly waived and released as a condition of, and as a consideration for, the execution of this Indenture and the issuance of such Securities.

**ARTICLE 13**  
**MISCELLANEOUS PROVISIONS**

Section 13.01 Effect on Successors and Assigns.

All the covenants, stipulations, promises and agreements in this Indenture made by or on behalf of the Company shall bind its successors and assigns, whether so expressed or not.

Section 13.02 Actions by Successor.

Any act or proceeding by any provision of this Indenture authorized or required to be done or performed by any board, committee or officer of the Company shall and may be done and performed with like force and effect by the corresponding board, committee or officer of any corporation that shall at the time be the lawful successor of the Company.

Section 13.03 Surrender of Company Powers.

The Company by instrument in writing executed by authority of its Board of Directors and delivered to the Trustee may surrender any of the powers reserved to the Company, and thereupon such power so surrendered shall terminate both as to the Company and as to any successor corporation.

Section 13.04 Notices.

Except as otherwise expressly provided herein, any notice, request or demand that by any provision of this Indenture is required or permitted to be given, made or served by the Trustee or by the holders of Securities or by any other Person pursuant to this Indenture to or on the Company may be given or served by any standard form of telecommunication or by being deposited in first class mail, postage prepaid, addressed (until another address is filed in writing by the Company with the Trustee), as follows: [ ]. Any notice, election, request or demand by the Company or any Securityholder or by any other Person pursuant to this Indenture to or upon the Trustee shall be deemed to have been sufficiently given or made, for all purposes, if given or made in writing at the Corporate Trust Office of the Trustee. Notwithstanding anything herein to the contrary, where reference herein is made to notice of any event (including notice of redemption) to a Securityholder of Global Securities, whether by mail or otherwise, such notice shall be sufficiently given when delivered to the Depositary (or its designee) pursuant to the customary procedures of the Depositary.

Section 13.05 Governing Law; Jury Trial Waiver.

THIS INDENTURE AND EACH SECURITY, AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS INDENTURE AND EACH SECURITY, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK (WITHOUT REGARD TO THE CONFLICTS OF LAWS PROVISIONS THEREOF). EACH OF THE COMPANY AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE SECURITIES OR THE TRANSACTION CONTEMPLATED HEREBY.

Section 13.06 Treatment of Securities as Debt.

It is intended that the Securities will be treated as indebtedness and not as equity for federal income tax purposes. The provisions of this Indenture shall be interpreted to further this intention.

Section 13.07 Certificates and Opinions as to Conditions Precedent.

(a) Upon any application or demand by the Company to the Trustee to take any action under any of the provisions of this Indenture, the Company shall furnish to the Trustee an Officer's Certificate stating that all covenants and conditions precedent provided for in this Indenture (other than the certificate to be delivered pursuant to Section 13.12) relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such covenants and conditions precedent have been complied with.

(b) Each certificate or opinion provided for in this Indenture and delivered to the Trustee with respect to compliance with a condition or covenant in this Indenture shall include (i) a statement that the Person making such certificate or opinion has read such covenant or condition; (ii) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based; (iii) a statement that, in the opinion of such Person, he has made such examination or investigation as is reasonably necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with; and (iv) a statement as to whether or not, in the opinion of such Person, such condition or covenant has been complied with.

Section 13.08 Payments on Business Days.

Except as provided pursuant to Section 2.01 pursuant to a Board Resolution, and set forth in an Officer's Certificate, or established in one or more indentures supplemental to this Indenture, in any case where the date that principal of, interest and/or premium, if any, on any Security is due or otherwise payable shall not be a Business Day or is a day on which the banking institutions in the city of the office of the Paying Agent are authorized or obligated by law to close or be closed, then payment of principal, premium, if any, and/or interest may be made on the next succeeding day that is a Business Day and is not a day on which the banking institutions in the city of the office of the Paying Agent are authorized or obligated by law to close or be closed with the same force and effect as if made on the nominal date of maturity or redemption, and no interest shall accrue for the period after such nominal date.

Section 13.09 Conflict with Trust Indenture Act.

If and to the extent that any provision of this Indenture limits, qualifies or conflicts with the duties imposed by Sections 310 to 317, inclusive, of the Trust Indenture Act, such imposed duties shall control.

Section 13.10 Counterparts.

This Indenture may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute but one and the same instrument. The exchange of copies of this Indenture and of signature pages by facsimile or PDF transmission shall constitute effective execution and delivery of this Indenture as to the parties hereto and may be used in lieu of the original Indenture for all purposes. Signatures of the parties hereto transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

Section 13.11 Separability.

In case any one or more of the provisions contained in this Indenture or in the Securities of any series shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provisions of this Indenture or of such Securities, but this Indenture and such Securities shall be construed as if such invalid or illegal or unenforceable provision had never been contained herein or therein.

Section 13.12 Compliance Certificates.

The Company shall deliver to the Trustee, within 120 days after the end of each fiscal year during which any Securities of any series were outstanding, an Officer's Certificate stating whether or not the signers know of any Event of Default that occurred during such fiscal year. Such certificate shall contain a certification from the principal executive officer, principal financial officer or principal accounting officer of the Company that a review has been conducted of the activities of the Company and the Company's performance under this Indenture and that the Company has complied with all conditions and covenants under this Indenture. For purposes of this Section 13.12, such compliance shall be determined without regard to any period of grace or requirement of notice provided under this Indenture. If the officer of the Company signing such certificate has knowledge of such an Event of Default, the certificate shall describe any such Event of Default and its status.

Section 13.13 USA PATRIOT ACT.

The parties hereto acknowledge that in accordance with Section 326 of the USA PATRIOT Act, the Trustee, like all financial institutions and in order to help fight the funding of terrorism and money laundering, is required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens an account with the Trustee. The parties to this Indenture agree that they will provide the Trustee with such information as it may request in order for the Trustee to satisfy the requirements of the USA PATRIOT Act.

Section 13.14 Calculations.

It is understood that the Trustee nor the Paying Agent shall have no responsibility for any calculations hereunder and shall be entitled to conclusively rely on the calculations of the Company without any independent verification or investigation.

**ARTICLE 14  
SUBORDINATION OF SECURITIES**

Section 14.01 Subordination Terms.

The payment by the Company of the principal of, premium, if any, and interest on any series of Securities issued hereunder shall be subordinated to the extent set forth in an indenture supplemental hereto relating to such series.

**IN WITNESS WHEREOF**, the parties hereto have caused this Indenture to be duly executed all as of the day and year first above written.

**AKERO THERAPEUTICS, INC.,** as Issuer

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**[TRUSTEE]**, as Trustee

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature Page to Form of Indenture

**TRUST INDENTURE ACT CROSS-REFERENCE TABLE<sup>2</sup>**

<b>Section of Trust Indenture Act of 1939, as amended</b>	<b>Section of Indenture</b>
310(a)	7.09
310(b)	7.08
	7.10
310(c)	Inapplicable
311(a)	7.13
311(b)	7.13
311(c)	Inapplicable
312(a)	5.01
	5.02(a)
312(b)	5.02(c)
312(c)	5.02(c)
313(a)	5.04(a)
313(b)	5.04(b)
313(c)	5.04(a)
	5.04(b)
313(d)	5.04(c)
314(a)	5.03
	13.12
314(b)	Inapplicable
314(c)	13.07(a)
314(d)	Inapplicable
314(e)	13.07(b)
314(f)	Inapplicable
315(a)	7.01(a)
	7.01(b)
315(b)	7.14
315(c)	7.01(a)
315(d)	7.01(b)
315(e)	6.07
316(a)	6.06
	8.04
316(b)	6.04
316(c)	8.01
317(a)	6.02
317(b)	4.03
318(a)	13.09

<sup>2</sup> This Cross-Reference Table does not constitute part of the Indenture and shall not have any bearing on the interpretation of any of its terms or provisions.



Goodwin Procter LLP

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May 18, 2021

Akeru Therapeutics, Inc.  
601 Gateway Boulevard, Suite 350  
South San Francisco, CA 94080Re: Securities Being Registered under Registration Statement on Form S-3

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-3 (as amended or supplemented, the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the offering by Akeru Therapeutics, Inc., a Delaware corporation (the "Company"), of any combination of (i) common stock, par value \$0.0001 per share (the "Common Stock"), of the Company, (ii) preferred stock, par value \$0.0001 per share, of the Company (the "Preferred Stock"), (iii) debt securities of the Company ("Debt Securities"), (iv) warrants to purchase Common Stock, Preferred Stock, Debt Securities or Units (as defined below) ("Warrants") and (v) units comprised of Common Stock, Preferred Stock, Debt Securities, Warrants and other securities in any combination ("Units"). The Common Stock, Preferred Stock, Debt Securities, Warrants and Units are sometimes referred to collectively herein as the "Securities." Securities may be issued in an unspecified number (with respect to Common Stock, Preferred Stock, Warrants and Units) or in an unspecified principal amount (with respect to Debt Securities). The Registration Statement provides that the Securities may be offered separately or together, in separate series, in amounts, at prices and on terms to be set forth in one or more prospectus supplements (each a "Prospectus Supplement") to the prospectus contained in the Registration Statement.

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinions set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinions set forth below, on certificates of officers of the Company.

The opinions set forth below are limited to the Delaware General Corporation Law and the law of New York.

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For purposes of the opinions set forth below, without limiting any other exceptions or qualifications set forth herein, we have assumed that (i) each of the Debt Securities, Warrants and Units, and the indentures, warrant agreements, unit agreements and other agreements governing Securities offered pursuant to the Registration Statement will be governed by the internal law of New York and (ii) after the issuance of any Securities offered pursuant to the Registration Statement, the total number of issued shares of Common Stock or Preferred Stock, as applicable, together with the total number of shares of such stock issuable upon the exercise, exchange, conversion or settlement, as the case may be, of any exercisable, exchangeable or convertible security (including without limitation any Unit), as the case may be, then outstanding, will not exceed the total number of authorized shares of Common Stock or Preferred Stock, as applicable, available for issuance under the Company's certificate of incorporation as then in effect (the "Charter").

For purposes of the opinions set forth below, we refer to the following as the "Future Authorization and Issuance" of Securities:

- with respect to any of the Securities, (a) the authorization by the Company of the amount, terms and issuance of such Securities (the "Authorization") and (b) the issuance of such Securities in accordance with the Authorization therefor upon the receipt by the Company of the consideration (which, in the case of shares of Common Stock or Preferred Stock, is not less than the par value of such shares) to be paid therefor in accordance with the Authorization;
- with respect to Preferred Stock, (a) the establishment of the terms of such Preferred Stock by the Company in conformity with the Charter and applicable law and (b) the execution, acknowledgement and filing with the Delaware Secretary of State, and the effectiveness of, a certificate of designations to the Charter setting forth the terms of such Preferred Stock in accordance with the Charter and applicable law;
- with respect to Debt Securities, (a) the authorization, execution and delivery of the indenture or a supplemental indenture relating to such Securities by the Company and the trustee thereunder and/or (b) the establishment of the terms of such Securities by the Company in conformity with the applicable indenture or supplemental indenture and applicable law, and (c) the execution, authentication and issuance of such Securities in accordance with the applicable indenture or supplemental indenture and applicable law; and
- with respect to Warrants or Units, (a) the authorization, execution and delivery by the Company and the other parties thereto of any agreement under which such Securities are to be issued, and (b) the establishment of the terms of such Securities and the issuance of such Securities in conformity with those terms, the terms of any applicable agreement and applicable law.

Based upon the foregoing, and subject to the additional qualifications set forth below, we are of the opinion that:

1. Upon the Future Authorization and Issuance of shares of Common Stock, such shares of Common Stock will be validly issued, fully paid and nonassessable.
-

2. Upon the Future Authorization and Issuance of shares of Preferred Stock, such shares of Preferred Stock will be validly issued, fully paid and nonassessable.
3. Upon the Future Authorization and Issuance of Debt Securities, such Debt Securities will be valid and binding obligations of the Company.
4. Upon the Future Authorization and Issuance of Warrants, such Warrants will be valid and binding obligations of the Company.
5. Upon the Future Authorization and Issuance of Units, such Units will be valid and binding obligations of the Company

The opinions expressed above are subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other similar laws of general application affecting the rights and remedies of creditors and to general principles of equity.

This opinion letter and the opinions it contains shall be interpreted in accordance with the Core Opinion Principles as published in 74 *Business Lawyer* 815 (Summer 2019).

We hereby consent to the inclusion of this opinion as Exhibit 5.1 to the Registration Statement and to the references to our firm under the caption "Legal Matters" in the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ GOODWIN PROCTER LLP

GOODWIN PROCTER LLP

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Boston, MA 02210

goodwinlaw.com  
+1 617 570 1000

May 18, 2021

Akero Therapeutics, Inc.  
601 Gateway Boulevard, Suite 350  
South San Francisco, CA 94080

Re: Securities Registered under Registration Statement on Form S-3

We have acted as counsel to you in connection with your filing of a Registration Statement on Form S-3ASR (as amended or supplemented, the "Registration Statement") pursuant to the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration of the offering by Akero Therapeutics, Inc., a Delaware corporation (the "Company"), of an indeterminate amount of any combination of securities of the type specified therein. The Registration Statement was declared effective by the Commission on May 18, 2021. Reference is made to our opinion letter dated May 18, 2021 and included as Exhibit 5.1 to the Registration Statement. We are delivering this supplemental opinion letter in connection with the distribution agreement prospectus (the "Prospectus") contained in the Registration Statement. The Prospectus relates to the offering by the Company of up to \$100,000,000 in shares (the "Shares") of the Company's common stock, par value \$0.0001 per share ("Common Stock") covered by the Registration Statement. The Shares are being offered and sold by the sales agent named in, and pursuant to, the distribution agreement among the Company and such sales agent.

We have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinion set forth below. We have relied, without independent verification, on certificates of public officials and, as to matters of fact material to the opinion set forth below, on certificates of officers of the Company.

For purposes of the opinion set forth below, we have assumed that the Shares are issued for a price per share equal to or greater than the minimum price authorized by the Company's board of directors prior to the date hereof (the "Minimum Price") and that no event occurs that causes the number of authorized shares of Common Stock available for issuance by the Company to be less than the number of then unissued Shares that may be issued for the Minimum Price.

For purposes of the opinion set forth below, we refer to the following as "Future Approval and Issuance": (a) the approval by the Company's board of directors (or a duly authorized committee of the board of directors) of the issuance of the Shares (the "Approval") and (b) the issuance of the Shares in accordance with the Approval and the receipt by the Company of the consideration (which shall not be less than the par value of such Shares) to be paid in accordance with the Approval.

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The opinion set forth below is limited to the Delaware General Corporation Law.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized and, upon Future Approval and Issuance, will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this Exhibit 5.2 to the Registration Statement. In giving our consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Very truly yours,

/s/ Goodwin Procter LLP

GOODWIN PROCTER LLP

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 16, 2021, relating to the financial statements of Akerio Therapeutics, Inc. appearing in the Annual Report on Form 10-K of Akerio Therapeutics, Inc. for the year ended December 31, 2020. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Deloitte & Touche LLP

Parsippany, NJ

May 18, 2021

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