Table of Contents

As filed with the Securities and Exchange Commission on December 5, 2019.

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

AXSOME THERAPEUTICS, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**45-4241907**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification Number)

200 Broadway
3rd Floor
New York, New York 10038
(212) 332-3241
(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Herriot Tabuteau, M.D.
President and Chief Executive Officer
Axsome Therapeutics, Inc.
200 Broadway
3rd Floor
New York, New York 10038
(212) 332-3241
(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

Copies to:
Emilio Ragosa
DLA Piper LLP (US)
51 John F. Kennedy Parkway, Suite 120
Short Hills, NJ 07078
(973) 215 2804

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, 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, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐	Accelerated filer ☒
Non-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 Securities Act. ☒

Table of Contents

CALCULATION OF REGISTRATION FEE

Title of each Class of Securities to be Registered[1]	Amount to be Registered/Proposed Maximum Aggregate Offering Price Per Security/Proposed Maximum Aggregate Offering Price[3]	Amount of Registration Fee
Primary Offering of Securities:		
Common Stock, $0.0001 par value per share	(2)	(4)
Preferred Stock, $0.0001 par value per share	(2)	(4)
Warrants	(2)	(4)
Debt Securities	(2)	(4)
Rights to purchase common stock, preferred stock, debt securities or units	(2)	(4)
Units[5]	(2)	(4)
Primary Offering of Common Stock:		
Common Stock, $0.0001 par value per share	$80,000,000	$10,384[6]
TOTAL[7]	$80,000,000	$10,384

(1) Pursuant to Rule 416(a) of the Securities Act of 1933, as amended, or the Securities Act, this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or similar transaction.
(2) Omitted pursuant to Form S-3 General Instruction II.E.
(3) The securities registered hereunder include such indeterminate (a) number of shares of common stock, (b) number of shares of preferred stock, (c) number of warrants to purchase debt securities, preferred stock or common stock, or any combination thereof, (d) debt securities of the registrant, (e) units consisting of some or all of these securities, and (f) rights to purchase common stock, preferred stock, debt securities or units, as may be sold from time to time by the registrant. There are also being registered hereunder an indeterminate number of shares of common stock and preferred stock as shall be issuable upon conversion, exchange or exercise of any securities that provide for such issuance. Separate consideration may or may not be received for securities that are issuable on exercise, conversion or exchange of other securities or that are issued together with other securities registered hereunder.
(4) In accordance with Rule 456(b) and Rule 457(r), the registrant is deferring payment of all of the registration fee.
(5) Any securities registered hereunder may be sold separately or as units with other securities registered hereunder.
(6) Calculated in accordance with Rule 457(o) and Rule 457(r) under the Securities Act of 1933, as amended.
(7) Does not include the registration fees deferred in accordance with Rule 456(b) and Rule 457(r), as described in Note (4) above.

EXPLANATORY NOTE

This registration statement contains two prospectuses:

- a base prospectus which covers the offering, issuance and sale by us of the securities identified above from time to time in one or more offerings; and
- a sales agreement prospectus covering the offering, issuance and sale by us of up to a maximum aggregate offering price of $80,000,000 of our common stock that may be issued and sold under a sales agreement with SVB Leerink LLC.

The base prospectus immediately follows this explanatory note. The specific terms of any other securities to be offered pursuant to the base prospectus will be specified in one or more prospectus supplements to the base prospectus. The sales agreement prospectus immediately follows the base prospectus.

PROSPECTUS

AXSOME THERAPEUTICS, INC.
Common Stock
Preferred Stock
Warrants
Debt Securities
Rights to Purchase Common Stock, Preferred Stock,
Debt Securities or Units
Units

We may offer and sell from time to time our shares of common stock, shares of preferred stock, warrants, debt securities and rights to purchase common stock, preferred stock, debt securities or units, as well as units that include any of these securities.

This prospectus provides you with a general description of the securities we may offer. Each time we offer securities pursuant to this prospectus, we will provide a prospectus supplement containing specific terms of the particular offering together with this prospectus. You should read this prospectus and the applicable prospectus supplement carefully before you invest in any securities. The prospectus supplement also may add, update or change information contained in this prospectus. This prospectus may not be used to offer and sell securities unless accompanied by the applicable prospectus supplement.

Our common stock is listed on the Nasdaq Global Market under the symbol “AXSM.” On December 3, 2019, the last reported sale price of our common stock on the Nasdaq Global Market was $45.61.

Investing in our securities involves significant risks. We strongly recommend that you read carefully the risks we describe in this prospectus and in any accompanying prospectus supplement, as well as the risk factors that are incorporated by reference into this prospectus from our filings made with the Securities and Exchange Commission. See “Risk Factors” on page 3 of this prospectus.

We may sell the securities directly to investors, or to or through underwriters or dealers, and also to other purchasers or through agents. The names of any underwriters or agents that are included in a sale of securities to you, and any applicable commissions or discounts, will be stated in an accompanying prospectus supplement. In addition, the underwriters, if any, may over-allot a portion of the securities.

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

The date of this prospectus is December 5, 2019

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

This prospectus is part of an automatic "shelf" registration statement on Form S-3ASR 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 process, we may offer and sell from time to time any combination of the securities described in this prospectus in one or more offerings in amounts, at prices and on terms that we determine at the time of the offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities under this registration statement we will provide a prospectus supplement that describes the terms of the relevant offering. The prospectus supplement also may add, update or change information contained in this prospectus. Before making an investment decision, you should read carefully both this prospectus and any prospectus supplement together with the documents incorporated by reference into this prospectus as described below under the heading "Information Incorporated by Reference."

The registration statement that contains this prospectus, including the exhibits to the registration statement and the information incorporated by reference, provides additional information about us and our securities. That registration statement can be read at the SEC website (www.sec.gov), as discussed below under the heading "Where You Can Find More Information."

You should rely only on the information provided in the registration statement, this prospectus and in any prospectus supplement, including the information incorporated by reference. We have not authorized anyone to provide you with different information. You should not assume that the information in this prospectus or any supplement to this prospectus is accurate at any date other than the date indicated on the cover page of these documents or the filing date of any document incorporated by reference, regardless of its time of delivery. We are not making an offer to sell the securities in any jurisdiction where the offer or sale is not permitted.

We may sell our securities to or through underwriters, initial purchasers, dealers or agents, directly to purchasers or through a combination of any of these methods of sale, as designated from time to time. We and our agents reserve the sole right to accept or reject in whole or in part any proposed purchase of our securities. An applicable prospectus supplement, which we will provide each time we offer the securities, will set forth the names of any underwriters, initial purchasers, dealers or agents involved in the sale of our securities, and any related fee, commission or discount arrangements. See "Plan of Distribution."

The terms "Axsome," the "Company," "our," "us" and "we," as used in this prospectus, refer to Axsome Therapeutics, Inc., unless we state otherwise or the context indicates otherwise.

AXSOME THERAPEUTICS, INC.

We are a clinical-stage biopharmaceutical company developing novel therapies for the management of central nervous system, or CNS, disorders for which there are limited treatment options. By focusing on this therapeutic area, we are addressing significant and growing markets where current treatment options are limited or inadequate. Our core CNS portfolio includes four CNS product candidates, AXS-05, AXS-07, AXS-09, and AXS-12, which are being developed for multiple indications. AXS-05 is currently in a Phase 3 trial in treatment resistant depression, or TRD, which we refer to as the STRIDE-1 study, a Phase 3 trial in major depressive disorder, or MDD, which we refer to as the GEMINI study, a Phase 3 open-label safety trial in patients with TRD and MDD; and a Phase 2/3 trial in agitation associated with Alzheimer's disease, or AD, which we refer to as the ADVANCE-1 study. We have completed a Phase 2 trial in MDD, which we refer to as the ASCEND study and a Phase 2 trial in smoking cessation. AXS-07 is currently in two Phase 3 trials for the acute treatment of migraine, which we refer to as the MOMENTUM and the INTERCEPT studies, and a Phase 3 open-label safety trial in patients with migraine. AXS-12 is being developed for the treatment of narcolepsy. We have completed a Phase 2 trial, which we refer to as the CONCERT study. The Axsome Pain and Primary Care business unit, or Axsome PPC, houses our pain and primary care assets, including AXS-02 and AXS-06, and intellectual property which covers these and related product candidates and molecules being developed by us and others. AXS-02 is being developed for the treatment of knee osteoarthritis, or OA, associated with bone marrow lesions, or BMLs. AXS-06 is being developed for the treatment of osteoarthritis and rheumatoid arthritis and for the reduction of the risk of nonsteroidal anti-inflammatory drug, or NSAID, associated gastrointestinal ulcers. Additionally, we are currently evaluating other product candidates, which we intend to develop for CNS disorders. We aim to become a fully integrated biopharmaceutical company that develops and commercializes differentiated therapies that expand the treatment options available to caregivers and improve the lives of patients living with CNS disorders.

AXS-05 is a novel, oral, investigational NMDA receptor antagonist with multimodal activity under development for the treatment of CNS disorders. AXS-05 consists of bupropion and dextromethorphan, or DM, and utilizes our metabolic inhibition technology. We are developing AXS-05 initially for the following four indications: TRD, agitation associated with AD, MDD, and as an aid to smoking cessation. The DM component of AXS-05 is a non-competitive N-methyl-D-aspartate, or NMDA, receptor antagonist, also known as a glutamate receptor modulator. The DM component of AXS-05 is also a sigma-1 receptor agonist, nicotinic acetylcholine receptor antagonist, and inhibitor of the serotonin and norepinephrine transporters. The bupropion component of AXS-05 serves to increase the bioavailability of dextromethorphan, and is a norepinephrine and dopamine reuptake inhibitor, and a nicotinic acetylcholine receptor antagonist. We intend to seek U.S. Food and Drug Administration, or FDA, approval for AXS-05 utilizing the 505(b)(2) regulatory development pathway.

AXS-07 is a novel, oral, investigational medicine with distinct dual mechanisms of action consisting of MoSEIC™, or Molecular Solubility Enhanced Inclusion Complex, meloxicam and rizatriptan. We are developing AXS-07 initially for the acute treatment of migraine. Meloxicam is a long-acting nonsteroidal anti-inflammatory drug, or NSAID, with COX-2, an enzyme involved in inflammation and pain pathways, preferential inhibition and potent pain-relieving effects. However, standard meloxicam has an extended time to maximum plasma concentration, or T_{max}, which delays its onset of action. AXS-07 utilizes our proprietary MoSEIC™ technology to substantially increase the solubility and speed the absorption of meloxicam while potentially maintaining durability of action. Meloxicam is a new molecular entity for migraine enabled by our MoSEIC™ technology. Rizatriptan is a 5-$HT_{1B/D}$ agonist that inhibits calcitonin gene-related peptide, or CGRP-mediated vasodilation, has been shown to have central trigeminal antinociceptive activity, and may reduce the release of inflammatory mediators from trigeminal nerves. Rizatriptan is approved as a single agent for the acute treatment of migraine. We intend to seek FDA approval for AXS-07 utilizing the 505(b)(2) regulatory development pathway.

AXS-09 is a novel, oral, investigational medicine consisting of esbupropion and DM, which is being developed for the treatment of CNS disorders. AXS-09 contains esbupropion, the chirally pure *S*-enantiomer of bupropion, as compared to the company's first generation product candidate AXS-05 which contains racemic bupropion, equal amounts of the *S*- and *R*-enantiomers. We have demonstrated in a Phase 1 trial that DM plasma levels are substantially increased into a potentially therapeutic range with repeated administration of AXS-09. Results of this Phase 1 trial coupled with preclinical data also indicate the potential for enhanced absorption and therapeutic effect of the *S*-enantiomer as compared to the *R*-enantiomer.

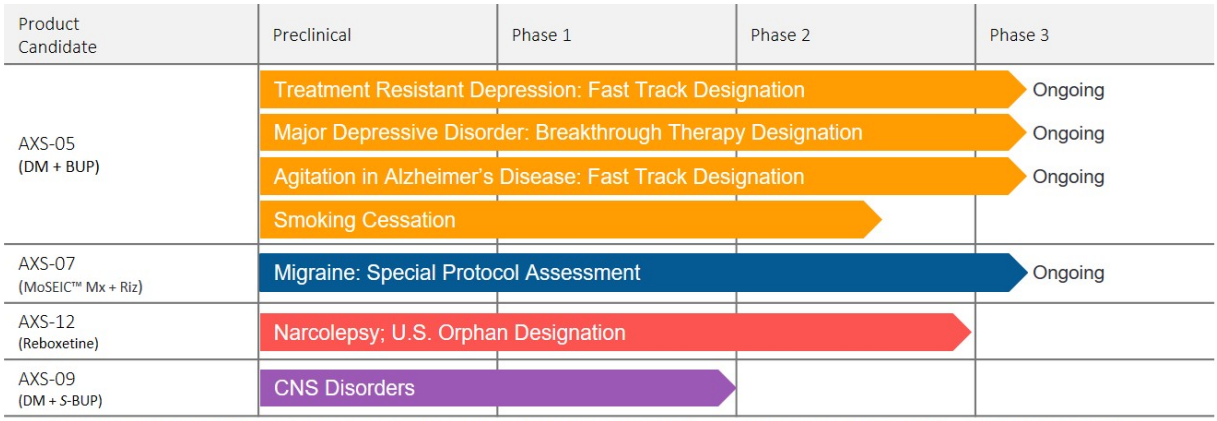
AXS-12, reboxetine, is a novel, oral, investigational medicine in development for treatment of narcolepsy. AXS-12 is a highly selective and potent norepinephrine reuptake inhibitor. The potential utility of AXS-12 in narcolepsy is supported by positive pre-clinical and clinical results in narcolepsy, and an extensive positive clinical safety record. Reboxetine, the active agent in AXS-12, significantly and dose-dependently reduced narcoleptic episodes in hypocretin, or orexin-deficient mice, a well-established genetic animal model of narcolepsy.

The Axsome PPC unit houses Axsome's pain and primary care assets, including AXS-02 and AXS-06, and intellectual property which covers these and related product candidates and molecules being developed by Axsome and others. AXS-02 is being developed for the treatment of knee osteoarthritis, or OA, associated with bone marrow lesions, or BMLs, and chronic low back pain, or CLBP, associated with Modic changes, or MCs. AXS-06 is being developed for the treatment of osteoarthritis and rheumatoid arthritis and for the reduction of the risk of NSAID-associated gastrointestinal ulcers.

AXS-02, disodium zoledronate tetrahydrate, is a potentially first-in-class, oral, targeted, non-opioid therapeutic for chronic pain. AXS-02 is a potent inhibitor of osteoclasts, which are bone remodeling cells that break down bone tissue. We are developing AXS-02 for the treatment of pain in the following two conditions: knee OA associated with BMLs and CLBP associated with type 1 or mixed type 1 and type 2 MCs. These conditions exhibit target lesions or specific pathology that we believe may be addressed by the mechanisms of action of AXS-02, such as inhibition of osteoclast activity. These mechanisms may result in a reduction of pain in these conditions. We intend to seek FDA approval for AXS-02 utilizing the 505(b)(2) regulatory development pathway.

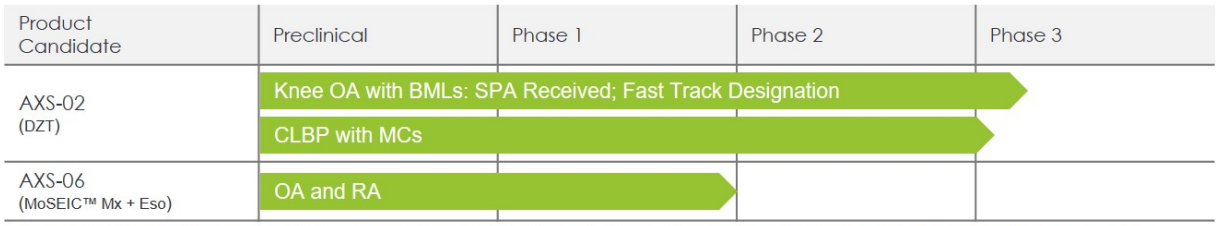
AXS-06 is a novel, oral, non-opioid, fixed-dose combination of MoSEIC™ meloxicam and esomeprazole. We are developing AXS-06 initially for the treatment of osteoarthritis and rheumatoid arthritis. Esomeprazole is a proton pump inhibitor which lowers stomach acidity and which has been shown to reduce the occurrence of NSAID-associated gastrointestinal ulcers. AXS-06 is designed to provide rapid, effective pain relief, and to reduce the risk of NSAID-associated gastrointestinal ulcers, with convenient once-daily dosing. We have successfully completed a Phase 1 trial of AXS-06 to characterize the pharmacokinetics of meloxicam and esomeprazole after oral administration of AXS-06. The results of our Phase 1 trial demonstrated that the median T_{max} for meloxicam, the trial's primary endpoint, was nine times faster for AXS-06 as compared to standard meloxicam. We intend to seek FDA approval for AXS-06 utilizing the 505(b)(2) regulatory development pathway.

Our current CNS product candidate pipeline is summarized in the table below:



Abbreviations: BUP = Bupropion; CNS = Central Nervous System; DM = Dextromethorphan; Mx = Meloxicam; Riz = Rizatriptan; *S*-BUP = Esbupropion; SPA = Special Protocol Assessment.

Additionally, our PPC product candidate pipeline is summarized in the table below:



Abbreviations: BML = Bone Marrow Lesions; CLBP = Chronic Low Back Pain; DZT = Disodium Zoledronate Tetrahydrate; Eso = Esomeprazole; MC = Modic Changes; Mx = Meloxicam; OA = Osteoarthritis; RA = Rheumatoid Arthritis; SPA = Special Protocol Assessment

Our principal executive offices are located at 200 Broadway, 3rd Floor, New York, New York 10038, and our telephone number is (212) 332-3241. Our website address is www.axsome.com. The information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our securities.

Our filings with the SEC are posted on our website at www.axsome.com. The information found on our website is not part of this or any other report we file with or furnish to the SEC.

RISK FACTORS

Investing in our securities involves risk. You should carefully consider the specific risks discussed or incorporated by reference into the applicable prospectus supplement, together with all the other information contained in the prospectus supplement or incorporated by reference into this prospectus and the applicable prospectus supplement. You should also consider the risks, uncertainties and assumptions discussed under the caption "Risk Factors" included in our Annual Report on Form 10-K for the year ended December 31, 2018 and in subsequent filings, which are incorporated by reference into this prospectus. These risk factors may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future or by a prospectus supplement relating to a particular offering of our securities. These risks and uncertainties are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or that we currently view as immaterial, may also impair our business. If any of the risks or uncertainties described in our SEC filings or any prospectus supplement or any additional risks and uncertainties actually occur, our business, financial condition and results of operations could be materially and adversely affected. In that case, the trading price of our securities could decline and you might lose all or part of your investment.

FORWARD-LOOKING STATEMENTS

From time to time, in reports filed with the Securities and Exchange Commission (including this registration statement), in press releases and in other communications to stockholders or the investment community, we may provide forward-looking statements concerning possible or anticipated future results of operations or business developments. These statements are based on our management's current expectations or predictions of future conditions, events or results based on various assumptions and our management's estimates of trends and economic factors in the markets in which we are active, as well as our business plans. Words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates," "projects," "forecasts," "may," "should," and variations of such words and similar expressions are intended to identify such forward-looking statements. The forward-looking statements may include, without limitation, statements regarding product candidate development, product candidate potential, regulatory environment, sales and marketing strategies, capital resources or operating performance. The forward-looking statements are subject to risks and uncertainties, which may cause results to differ materially from those set forth in the statements. Forward-looking statements in this registration statement should be evaluated together with the many uncertainties that affect our business and our market, particularly those discussed in the "Risk Factors" section of our Annual Report on Form 10-K for the year ended December 31, 2018 and our subsequent filings, which are incorporated by reference into this prospectus, to better understand the risks and uncertainties inherent in our business and underlying any forward-looking statements. Forward-looking statements are not guarantees of future performance, and actual results may differ materially from those projected. The forward-looking statements are representative only as of the date of this prospectus and except as required by law, we assume no responsibility to update any forward-looking statements, whether as a result of new information, future events or otherwise.

You should read this prospectus and the documents that we reference in this prospectus and have been filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any issuance or sale of our common shares. Except as required by law, we do not assume any obligation to update any forward-looking statements.

USE OF PROCEEDS

Unless otherwise indicated in the applicable prospectus supplement, we will use the net proceeds from the sale of the securities offered hereby for general corporate purposes, which may include, but are not limited to working capital, capital expenditures, funding the ongoing clinical development of our product candidates, general and administrative expenses or other corporate obligations. We may use a portion of the net proceeds to pay off outstanding indebtedness, if any, or acquire or invest in businesses, products and technologies.

DESCRIPTION OF CAPITAL STOCK

The following description is a general summary of the terms of the shares of common stock or shares of preferred stock that we may issue. The description below and in any prospectus supplement does not include all of the terms of the shares of common stock or shares of preferred stock and should be read together with our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, copies of which have been filed previously with the SEC. For more information on how you can obtain copies of our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws, see "Where You Can Find More Information."

Common Stock

General

Our Amended and Restated Certificate of Incorporation provides the authority to issue 150,000,000 shares of common stock, par value $0.0001 per share. As of November 1, 2019, there were 34,508,626 shares of common stock outstanding. Each share of our common stock has the same relative rights and is identical in all respects to each other share of our common stock. The rights, preferences and privileges of holders of our common stock are subject to the rights, preferences and privileges of the holders of shares of any series of preferred stock that we have issued or may issue in the future.

Voting Rights

The holders of our common stock are entitled to one vote per share on any matter to be voted upon by our stockholders. Our Amended and Restated Certificate of Incorporation does not permit cumulative voting in connection with the election of directors.

Dividends

The holders of our common stock are entitled to dividends, if any, as our board of directors may declare from time to time from funds legally available for that purpose, subject to the holders of other classes of stock, if any, at the time outstanding having prior rights as to dividends, if any.

Liquidation Rights

Upon any voluntary or involuntary liquidation, dissolution, or winding up of our affairs, the holders of our common stock are entitled to share ratably in all assets remaining after the payment of creditors, subject to any prior liquidation distribution rights of holders of other classes of stock, if any, at the time outstanding.

Miscellaneous

Holders of our common stock have no preemptive, conversion, redemption or sinking fund rights. The outstanding shares of our common stock are, and the shares of common stock to be offered hereby when issued will be, validly issued, fully paid and non-assessable.

Nasdaq Listing

Our common stock is listed on the Nasdaq Global Market under the symbol "AXSM."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC.

Preferred Stock

General

Our Amended and Restated Certificate of Incorporation authorizes the issuance of up to 10,000,000 shares of preferred stock, par value $0.0001 per share, none of which are issued and outstanding as of the date of this prospectus. We may issue, from time to time in one or more series, the terms of which may be determined at the time of issuance by our board of directors, without further action by our stockholders, shares of preferred stock and such shares may include voting rights, preferences as to dividends and liquidation, conversion rights, redemption rights and sinking fund provisions. The shares of each series of preferred stock shall have preferences, limitations and relative rights, including voting rights, identical with those of other shares of the same series and, except to the extent provided in the description of such series, of those of other series of preferred stock.

The issuance of any preferred stock could adversely affect the rights of the holders of common stock and, therefore, reduce the value of the common stock. The ability of our board of directors to issue preferred stock could discourage, delay or prevent a takeover or change in control.

The description of the terms of a particular series of preferred stock in the applicable prospectus supplement will not be complete. You should refer to the applicable certificate of designation for complete information regarding a series of preferred stock. The prospectus supplement will also contain a description of U.S. federal income tax consequences relating to the preferred stock, if material.

The terms of any particular series of preferred stock will be described in the prospectus supplement relating to that particular series of preferred stock, including, where applicable:

- the series designation, stated value and liquidation preference of such preferred stock and the number of shares offered;
- the offering price;
- the dividend rate or rates (or method of calculation), the date or dates from which dividends shall accrue, and whether such dividends shall be cumulative or noncumulative and, if cumulative, the dates from which dividends shall commence to cumulate;
- any redemption or sinking fund provisions;
- the amount that shares of such series shall be entitled to receive in the event of our liquidation, dissolution or winding-up;
- the terms and conditions, if any, on which shares of such series shall be convertible or exchangeable for shares of our stock of any other class or classes, or other series of the same class;
- the voting rights, if any, of shares of such series in addition to those set forth under the caption entitled, “Voting Rights” below;
- the status as to reissuance or sale of shares of such series redeemed, purchased or otherwise reacquired, or surrendered to us on conversion or exchange;
- the conditions and restrictions, if any, on the payment of dividends or on the making of other distributions on, or the purchase, redemption or other acquisition by us, of our common stock or of any other class of our stock ranking junior to the shares of such series as to dividends or upon liquidation (including, but not limited to, at such times as there are arrearages in the payment of dividends or sinking fund installments);

- the conditions and restrictions, if any, on the creation of Company indebtedness, or on the issue of any additional stock ranking on a parity with or prior to the shares of such series as to dividends or upon liquidation; and

- any additional dividend, liquidation, redemption, sinking or retirement fund and other rights, preferences, privileges, limitations and restrictions of such preferred stock.

If we issue shares of preferred stock under this prospectus and any related prospectus supplement, the shares will be fully paid and non-assessable and will not have, or be subject to, any preemptive or similar rights.

Voting Rights

The General Corporation Law of Delaware, or the DGCL provides that the holders of preferred stock will have the right to vote separately as a class on any proposal involving fundamental changes in the rights of holders of that preferred stock. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Transfer Agent and Registrar

The transfer agent and registrar for any series of preferred stock will be set forth in the applicable prospectus supplement.

Other

Our issuance of preferred stock could decrease the amount of earnings and assets available for distribution to the holders of common stock or could adversely affect the rights and powers, including voting rights, of the holders of common stock. The issuance of preferred stock could have the effect of decreasing the market price of our common stock.

Delaware Law and Certain Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws Provisions

Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws contain provisions that could delay or prevent a change of control of our company or changes in our board of directors that our stockholders might consider favorable. Some of these provisions:

- Authorize the issuance of preferred stock which can be created and issued by the board of directors without prior stockholder approval, with rights senior to those of our common stock;

- Provide for a classified board of directors, with each director serving a staggered three-year term;

- Prohibit our stockholders from filling board vacancies, calling special stockholder meetings or taking action by written consent;

- Provide for the removal of a director only with cause and by the affirmative vote of the holders of 66 2/3 % or more of the shares then entitled to vote at an election of our directors;

- Require advance written notice of stockholder proposals and director nominations; and

- Require any action instituted against our officers or directors in connection with their service to us to be brought in the state of Delaware.

In addition, we are subject to the provisions of Section 203 of the DGCL, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These and other provisions in our Amended and Restated Certificate of Incorporation, Amended and Restated Bylaws and the DGCL could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by our then-current board of directors, including a merger, tender offer or proxy contest involving our company. This provision could have the effect of delaying or preventing a change of control, whether or not it is desired by or beneficial to our stockholders. Any delay or prevention of a change of control transaction or changes in our board of directors could cause the market price of our common stock to decline.

Further, our Amended and Restated Certificate of Incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (1) any derivative action or proceeding brought on behalf of our company, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or agents to our company or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the DGCL, or (4) any action asserting a claim governed by the internal affairs doctrine, in each such case subject to such Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein.

Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our Amended and Restated Certificate of Incorporation described above. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents. Further, this choice of forum provision does not preclude or contract the scope of exclusive federal or concurrent jurisdiction for any actions brought under the Securities Act or the Exchange Act. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. In addition, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Securities Act or any other claim for which the federal and state courts have concurrent jurisdiction. Accordingly, our exclusive forum provision will not relieve us of our duties to comply with the federal securities laws and the rules and regulations thereunder, and our stockholders will not be deemed to have waived our compliance with these laws, rules and regulations.

Indemnification

Our Amended and Restated Certificate of Incorporation contains provisions permitted under the DGCL relating to the liability of directors. The provisions eliminate, to the extent legally permissible, a director's liability for monetary damages for a breach of fiduciary duty, except in circumstances involving wrongful acts, such as the breach of a director's duty of loyalty or acts or omissions that involve intentional misconduct or a knowing violation of law. The limitation of liability described above does not alter the liability of our directors and officers under federal securities laws. Furthermore, our certificate of incorporation contains provisions to indemnify our directors and officers to the fullest extent permitted by the DGCL. These provisions do not limit or eliminate our right or the right of any stockholder of ours to seek non-monetary relief, such as an injunction or rescission in the event of a breach by a director or an officer of his duty of care to us. We believe that these provisions assist us in attracting and retaining qualified individuals to serve as directors.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of shares of our common stock, shares of our preferred stock or debt securities. The following description sets forth certain general terms and provisions of the warrants that we may offer pursuant to this prospectus. The particular terms of the warrants and the extent, if any, to which the general terms and provisions may apply to the warrants so offered will be described in the applicable prospectus supplement.

Warrants may be issued independently or together with other securities and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent. The warrant agent will act solely as our agent in connection with the warrants and will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants.

A copy of the forms of the warrant agreement and the warrant certificate relating to any particular issue of warrants will be filed with the SEC each time we issue warrants, and you should read those documents for provisions that may be important to you. For more information on how you can obtain copies of the forms of the warrant agreement and the related warrant certificate, see "Where You Can Find More Information."

Stock Warrants

The prospectus supplement relating to a particular issue of warrants to issue shares of our common stock or shares of our preferred stock will describe the terms of the common share warrants and preferred share warrants, including the following:

- the title of the warrants;
- the offering price for the warrants, if any;
- the aggregate number of the warrants;
- the designation and terms of the shares of common stock or shares of preferred stock that may be purchased upon exercise of the warrants;
- the terms for changes or adjustments to the exercise price of the warrants;
- if applicable, the designation and terms of the securities that the warrants are issued with and the number of warrants issued with each security;
- if applicable, the date from and after which the warrants and any securities issued with the warrants will be separately transferable;
- the number of shares of common stock or shares of preferred stock that may be purchased upon exercise of a warrant and the price at which the shares may be purchased upon exercise;
- the dates on which the right to exercise the warrants commence and expire;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- if applicable, a discussion of material United States federal income tax considerations;
- anti-dilution provisions of the warrants, if any;
- redemption or call provisions, if any, applicable to the warrants;
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants; and
- any other information we think is important about the warrants.

Debt Warrants

The prospectus supplement relating to a particular issue of warrants to issue debt securities will describe the terms of those warrants, including the following:

- the title of the warrants;
- the offering price for the warrants, if any;
- the aggregate number of the warrants;
- the designation and terms of the debt securities purchasable upon exercise of the warrants;
- the terms for changes or adjustments to the exercise price of the warrants;

- if applicable, the designation and terms of the debt securities that the warrants are issued with and the number of warrants issued with each debt security;
- if applicable, the date from and after which the warrants and any debt securities issued with them will be separately transferable;
- the principal amount of debt securities that may be purchased upon exercise of a warrant and the price at which the debt securities may be purchased upon exercise;
- the dates on which the right to exercise the warrants will commence and expire;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- whether the warrants represented by the warrant certificates or debt securities that may be issued upon exercise of the warrants will be issued in registered or bearer form;
- information relating to book-entry procedures, if any;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- if applicable, a discussion of material United States federal income tax considerations;
- anti-dilution provisions of the warrants, if any;
- redemption or call provisions, if any, applicable to the warrants;
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants; and
- any other information we think is important about the warrants.

Exercise of Warrants

Each warrant will entitle the holder of the warrant to purchase at the exercise price set forth in the applicable prospectus supplement the number of shares of common stock, shares of preferred stock or the principal amount of debt securities being offered. Holders may exercise warrants at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants are void. Holders may exercise warrants as set forth in the prospectus supplement relating to the warrants being offered.

Until a holder exercises the warrants to purchase our shares of common stock, shares of preferred stock or debt securities, the holder will not have any rights as a holder of our shares of common stock, shares of preferred stock or debt securities, as the case may be, by virtue of ownership of warrants.

DESCRIPTION OF DEBT SECURITIES

The following is a general description of the terms of debt securities we may issue from time to time unless we provide otherwise in the applicable prospectus supplement. Particular terms of any debt securities we offer will be described in the prospectus supplement relating to such debt securities.

As required by Federal law for all bonds and notes of companies that are publicly offered, any debt securities we issue will be governed by a document called an "indenture," the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. We have summarized the general features of the debt securities to be governed by the indenture. The summary is not complete. An indenture is a contract between us and a financial institution acting as trustee on behalf of the holders of the debt securities, and is subject to and governed by the Trust Indenture Act of 1939, as amended. The trustee has two main roles. First, the trustee can enforce holders' rights against us if we default. There are some limitations on the extent to which the trustee acts on holders' behalf, described in the second paragraph under "Description of Debt Securities—Events of Default." Second, the trustee performs certain administrative duties, such as sending interest and principal payments to holders.

Because this section is a summary, it does not describe every aspect of any debt securities we may issue or the indenture governing any such debt securities. Particular terms of any debt securities we offer will be described in the prospectus supplement relating to such debt securities, and we urge you to read the applicable executed indenture, which will be filed with the SEC at the time of any offering of debt securities, because it, and not this description, will define the rights of holders of such debt securities.

A prospectus supplement will describe the particular terms of any series of debt securities we may issue, including some or all of the following:

- the designation or title of the series of debt securities;
- the total principal amount of the series of debt securities, the denominations in which the offered debt securities will be issued and whether the offering may be reopened for additional securities of that series and on what terms;
- the percentage of the principal amount at which the series of debt securities will be offered;
- the date or dates on which principal will be payable;
- the rate or rates (which may be either fixed or variable) and/or the method of determining such rate or rates of interest, if any;
- the date or dates from which any interest will accrue, or the method of determining such date or dates, and the date or dates on which any interest will be payable;
- the terms for redemption, extension or early repayment, if any;
- the currencies in which the series of debt securities are issued and payable;
- whether the amount of payments of principal, interest or premium, if any, on a series of debt securities will be determined with reference to an index, formula or other method and how these amounts will be determined;
- the place or places of payment, transfer, conversion and/or exchange of the debt securities;
- the provision for any sinking fund;
- any restrictive covenants;
- events of default;
- whether the series of debt securities are issuable in certificated form;
- any provisions for legal defeasance or covenant defeasance;

- whether and under what circumstances we will pay additional amounts in respect of any tax, assessment or governmental charge and, if so, whether we will have the option to redeem the debt securities rather than pay the additional amounts (and the terms of this option);
- any provisions for convertibility or exchangeability of the debt securities into or for any other securities;
- whether the debt securities are subject to subordination and the terms of such subordination;
- any listing of the debt securities on any securities exchange;
- if applicable, a discussion of certain U.S. Federal income tax considerations, including those related to original issue discount, if applicable; and
- any other material terms.

The debt securities may be secured or unsecured obligations. Unless the prospectus supplement states otherwise, principal, interest and premium, if any, will be paid by us in immediately available funds.

General

The indenture may provide that any debt securities proposed to be sold under this prospectus and the applicable prospectus supplement relating to such debt securities ("offered debt securities") and any debt securities issuable upon conversion or exchange of other offered securities ("underlying debt securities") may be issued under the indenture in one or more series.

For purposes of this prospectus, any reference to the payment of principal of, or interest or premium, if any, on, debt securities will include additional amounts if required by the terms of the debt securities.

Debt securities issued under an indenture, when a single trustee is acting for all debt securities issued under the indenture, are called the "indenture securities." The indenture may also provide that there may be more than one trustee thereunder, each with respect to one or more different series of securities issued thereunder. See "Description of Debt Securities—Resignation of Trustee" below. At a time when two or more trustees are acting under an indenture, each with respect to only certain series, the term "indenture securities" means the one or more series of debt securities with respect to which each respective trustee is acting. In the event that there is more than one trustee under an indenture, the powers and trust obligations of each trustee described in this prospectus will extend only to the one or more series of indenture securities for which it is trustee. If two or more trustees are acting under an indenture, then the indenture securities for which each trustee is acting would be treated as if issued under separate indentures.

We refer you to the applicable prospectus supplement relating to any debt securities we may issue from time to time for information with respect to any deletions from, modifications of 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, that will be applicable with respect to such debt securities.

We have the ability to issue indenture securities with terms different from those of indenture securities previously issued and, without the consent of the holders thereof, to reopen a previous issue of a series of indenture securities and issue additional indenture securities of that series unless the reopening was restricted when that series was created.

Conversion and Exchange

If any debt securities are convertible into or exchangeable for other securities, the related prospectus supplement will explain the terms and conditions of the conversion or exchange, including the conversion price or exchange ratio (or the calculation method), the conversion or exchange period (or how the period will be determined), if conversion or exchange will be mandatory or at the option of the holder or us, provisions for adjusting the conversion price or the exchange ratio and provisions affecting conversion or exchange in the event of the redemption of the underlying debt securities. These terms may also include provisions under which the number or amount of other securities to be received by the holders of the debt securities upon conversion or exchange would be calculated according to the market price of the other securities as of a time stated in the prospectus supplement.

Payment and Paying Agents

We will pay interest to the person listed in the applicable trustee's records as the owner of the debt security at the close of business on a particular day in advance of each due date for interest, even if that person no longer owns the debt security on the interest due date. That day, often approximately two weeks in advance of the interest due date, is called the "record date." Because we will pay all the interest for an interest period to the holders on the record date, holders buying and selling debt securities must work out between themselves the appropriate purchase price. The most common manner is to adjust the sales price of the debt securities to prorate interest fairly between buyer and seller based on their respective ownership periods within the particular interest period. This prorated interest amount is called "accrued interest."

Events of Default

Holders of debt securities of any series will have rights if an Event of Default occurs in respect of the debt securities of such series and is not cured, as described later in this subsection. The term "Event of Default" in respect of the debt securities of any series means any of the following:

- we do not pay the principal of, or any premium on, a debt security of the series on its due date;
- we do not pay interest on a debt security of the series within 30 days of its due date;
- we do not deposit any sinking fund payment in respect of debt securities of the series on its due date and we do not cure this default within five days;
- we remain in breach of a covenant in respect of debt securities of the series for 90 days after we receive a written notice of default stating we are in breach. The notice must be sent by either the trustee or holders of at least 25% of the principal amount of debt securities of the series;
- we file for bankruptcy or certain other events of bankruptcy, insolvency or reorganization occur; and
- any other Event of Default occurs in respect of debt securities of the series described in the prospectus supplement.

An Event of Default for a particular series of debt securities does not necessarily constitute an Event of Default for any other series of debt securities issued under the same or any other indenture. The trustee may withhold notice to the holders of debt securities of any default, except in the payment of principal, premium or interest, if it considers the withholding of notice to be in the best interests of the holders.

Remedies if an Event of Default Occurs

If an Event of Default has occurred and has not been cured or waived, the trustee or the holders of not less than 25% in principal amount of the debt securities of the affected series may declare the entire principal amount of all the debt securities of that series to be due and immediately payable. This is called a declaration of acceleration of maturity. A declaration of acceleration of maturity may be canceled by the holders of a majority in principal amount of the debt securities of the affected series if the default is cured or waived and certain other conditions are satisfied.

Except in cases of default, where the trustee has some special duties, the trustee typically is not required to take any action under an indenture at the request of any holders unless the holders offer the trustee reasonable protection from expenses and liability (called an "indemnity"). If reasonable indemnity is provided, the holders of a majority in principal amount of the outstanding debt securities of the relevant series may direct the time, method and place of conducting any lawsuit or other formal legal action seeking any remedy available to the trustee. The trustee may refuse to follow those directions in certain circumstances.

Before a holder is allowed to bypass the trustee and bring its own lawsuit or other formal legal action or take other steps to enforce its rights or protect its interests relating to any debt securities, the following must occur:

- the holder must give the trustee written notice that an Event of Default has occurred and remains uncured;

- the holders of at least 25% in principal amount of all outstanding debt securities of the relevant series must make a written request that the trustee take action because of the default and must offer reasonable indemnity to the trustee against the cost and other liabilities of taking that action;
- the trustee must not have taken action for 60 days after receipt of the above notice and offer of indemnity; and
- the holders of a majority in principal amount of the debt securities must not have given the trustee a direction inconsistent with the above notice during that 60-day period.

However, a holder is entitled at any time to bring a lawsuit for the payment of money due on its debt securities on or after the due date. Each year, we will furnish to each trustee a written statement of certain of our officers certifying that to their knowledge we are in compliance with the indenture and the debt securities, or else specifying any default.

Waiver of Default

The holders of a majority in principal amount of the relevant series of debt securities may waive a default for all such series of debt securities. If this happens, the default will be treated as if it had not occurred. No one can waive a payment default on a holder's debt security, however, without the holder's approval.

Merger or Consolidation

Under the terms of an indenture, we may be permitted to consolidate or merge with another entity. We may also be permitted to sell all or substantially all of our assets to another entity. However, typically we may not take any of these actions unless all the following conditions are met:

- if we do not survive such transaction or we convey, transfer or lease our properties and assets substantially as an entirety, the acquiring company must be a corporation, limited liability company, partnership or trust, or other corporate form, organized under the laws of any state of the United States or the District of Columbia, and such company must agree to be legally responsible for our debt securities, and, if not already subject to the jurisdiction of any state of the United States or the District of Columbia, the new company must submit to such jurisdiction for all purposes with respect to the debt securities and appoint an agent for service of process;
- alternatively, we must be the surviving company;
- immediately after the transaction no Event of Default will exist;
- we must deliver certain certificates and documents to the trustee; and
- we must satisfy any other requirements specified in the prospectus supplement relating to a particular series of debt securities.

Modification or Waiver

There are three types of changes we may make to an indenture and the debt securities issued thereunder.

Changes Requiring Approval

First, there are changes that we cannot make to debt securities without specific approval of all of the holders. The following is a list of the types of changes that may require specific approval:

- change the stated maturity of the principal of or rate of interest on a debt security;
- reduce any amounts due on a debt security;
- reduce the amount of principal payable upon acceleration of the maturity of a security following a default;

- at any time after a change of control has occurred, reduce any premium payable upon a change of control;
- change the place or currency of payment on a debt security (except as otherwise described in the prospectus or prospectus supplement);
- impair the right of holders to sue for payment;
- adversely affect any right to convert or exchange a debt security in accordance with its terms;
- reduce the percentage of holders of debt securities whose consent is needed to modify or amend the indenture;
- reduce the percentage of holders of debt securities whose consent is needed to waive compliance with certain provisions of the indenture or to waive certain defaults;
- modify any other aspect of the provisions of the indenture dealing with supplemental indentures, modification and waiver of past defaults, changes to the quorum or voting requirements or the waiver of certain covenants; and
- change any obligation we have to pay additional amounts.

Changes Not Requiring Approval

The second type of change does not require any vote by the holders of the debt securities. This type is limited to clarifications and certain other changes that would not adversely affect holders of the outstanding debt securities in any material respect, including the addition of covenants and guarantees. We also do not need any approval to make any change that affects only debt securities to be issued under the indenture after the change takes effect.

Changes Requiring Majority Approval

Any other change to the indenture and the debt securities may require the following approval:

- if the change affects only one series of debt securities, it must be approved by the holders of a majority in principal amount of that series; and
- if the change affects more than one series of debt securities issued under the same indenture, it must be approved by the holders of a majority in principal amount of all of the series affected by the change, with all affected series voting together as one class for this purpose.

The holders of a majority in principal amount of all of the series of debt securities issued under an indenture, voting together as one class for this purpose, may waive our compliance obligations with respect to some of our covenants in that indenture. However, we cannot obtain a waiver of a payment default or of any of the matters covered by the bullet points included above under “Description of Debt Securities—Modification or Waiver—Changes Requiring Approval.”

Further Details Concerning Voting

When taking a vote on proposed changes to the indenture and the debt securities, we expect to use the following rules to decide how much principal to attribute to a debt security:

- for original issue discount securities, we will use the principal amount that would be due and payable on the voting date if the maturity of these debt securities were accelerated to that date because of a default;
- for debt securities whose principal amount is not known (for example, because it is based on an index), we will use a special rule for that debt security described in the related prospectus supplement; and
- for debt securities denominated in one or more foreign currencies, we will use the U.S. dollar equivalent.

Debt securities will not be considered outstanding, and therefore not eligible to vote, if we have deposited or set aside in trust money for their payment or redemption. Debt securities will also not be eligible to vote if they have been fully defeased as described later under "Description of Debt Securities—Defeasance—Legal Defeasance."

We generally will be entitled to set any day as a record date for the purpose of determining the holders of outstanding indenture securities that are entitled to vote or take other action under the indenture. If we set a record date for a vote or other action to be taken by holders of one or more series, that vote or action may be taken only by persons who are holders of outstanding indenture securities of those series on the record date and must be taken within 11 months following the record date.

Book-entry and other indirect holders will need to consult their banks or brokers for information on how approval may be granted or denied if we seek to change the indenture or the debt securities or request a waiver.

Defeasance

The following provisions will be applicable to each series of debt securities unless we state in the applicable prospectus supplement that the provisions of covenant defeasance and legal defeasance will not be applicable to that series.

Covenant Defeasance

We can make the deposit described below and be released from some of the restrictive covenants in the indenture under which the particular series was issued. This is called "covenant defeasance." In that event, the holders would lose the protection of those restrictive covenants but would gain the protection of having money and government securities set aside in trust to repay holders' debt securities. If applicable, a holder also would be released from the subordination provisions described under "Description of Debt Securities—Indenture Provisions—Subordination" below. In order to achieve covenant defeasance, we must do the following:

- If the debt securities of the particular series are denominated in U.S. dollars, we must deposit in trust for the benefit of all holders of such debt securities a combination of money and U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal and any other payments on the debt securities on their various due dates;

- We may be required to deliver to the trustee a legal opinion of our counsel confirming that, under current U.S. Federal income tax law, we may make the above deposit without causing the holders to be taxed on the debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves at maturity; and

- We must deliver to the trustee certain documentation stating that all conditions precedent to covenant defeasance have been complied with.

If we accomplish covenant defeasance, holders can still look to us for repayment of the debt securities if there were a shortfall in the trust deposit or the trustee is prevented from making payment. In fact, if one of the remaining Events of Default occurred (such as our bankruptcy) and the debt securities became immediately due and payable, there might be a shortfall. Depending on the event causing the default, holders may not be able to obtain payment of the shortfall.

Legal Defeasance

As described below, we can legally release ourselves from all payment and other obligations on the debt securities of a particular series (called "legal defeasance"), (1) if there is a change in U.S. Federal tax law that allows us to effect the release without causing the holders to be taxed any differently than if the release had not occurred, and (2) if we put in place the following other arrangements for holders to be repaid:

- If the debt securities of the particular series are denominated in U.S. dollars, we must deposit in trust for the benefit of all holders of such debt securities a combination of money and U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal and any other payments on the debt securities on their various due dates;

- We may be required to deliver to the trustee a legal opinion confirming that there has been a change in current U.S. Federal tax law or an Internal Revenue Service ruling that allows us to make the above deposit without causing the holders to be taxed on the debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves at maturity. Under current U.S. Federal tax law, the deposit and our legal release from the debt securities would be treated as though we paid each holder its share of the cash and notes or bonds at the time the cash and notes or bonds were deposited in trust in exchange for its debt securities and holders would recognize gain or loss on the debt securities at the time of the deposit; and

- We must deliver to the trustee a legal opinion and officers' certificate stating that all conditions precedent to legal defeasance have been complied with.

If we ever did accomplish legal defeasance, as described above, holders would have to rely solely on the trust deposit for repayment of the debt securities. Holders could not look to us for repayment in the unlikely event of any shortfall. Conversely, the trust deposit would most likely be protected from claims of our lenders and other creditors if we ever became bankrupt or insolvent. If applicable, holders would also be released from the subordination provisions described later under "Description of Debt Securities—Indenture Provisions—Subordination."

Resignation of Trustee

Each trustee may resign or be removed with respect to one or more series of indenture securities provided that a successor trustee is appointed to act with respect to such series. In the event that two or more persons are acting as trustee with respect to different series of indenture securities under the indenture, each of the trustees will be a trustee of a trust separate and apart from the trust administered by any other trustee.

Indenture Provisions—Subordination

Upon any distribution of our assets upon our dissolution, winding up, liquidation or reorganization, the payment of the principal of (and premium, if any) and interest on any indenture securities denominated as subordinated debt securities is to be subordinated to the extent provided in the indenture in right of payment to the prior payment in full of all Senior Indebtedness (defined below), but our obligation to holders to make payment of the principal of (and premium, if any) and interest on such subordinated debt securities will not otherwise be affected. In addition, no payment on account of principal (or premium, if any), interest or sinking fund, if any, may be made on such subordinated debt securities at any time unless full payment of all amounts due in respect of the principal (and premium, if any), interest and sinking fund, if any, on Senior Indebtedness has been made or duly provided for in money or money's worth.

In the event that, notwithstanding the foregoing, any payment from us is received by the trustee in respect of subordinated debt securities or by the holders of any of such subordinated debt securities before all Senior Indebtedness is paid in full, the payment or distribution must be paid over to the holders of the Senior Indebtedness or on their behalf for application to the payment of all the Senior Indebtedness remaining unpaid until all the Senior Indebtedness has been paid in full, after giving effect to any concurrent payment or distribution to the holders of the Senior Indebtedness. Subject to the payment in full of all Senior Indebtedness, the holders of such subordinated debt securities will be subrogated to the rights of the holders of the Senior Indebtedness to the extent of payments made to the holders of the Senior Indebtedness out of the distributive share of such subordinated debt securities.

By reason of this subordination, in the event of a distribution of our assets upon our insolvency, certain of our senior creditors may recover more, ratably, than holders of any subordinated debt securities. The related indenture will provide that these subordination provisions will not apply to money and securities held in trust under the defeasance provisions of the indenture.

"Senior Indebtedness" will be defined in an applicable indenture as the principal of (and premium, if any) and unpaid interest on:

- our indebtedness (including indebtedness of others guaranteed by us), whenever created, incurred, assumed or guaranteed, for money borrowed (other than indenture securities issued under the indenture and denominated as subordinated debt securities), unless in the instrument creating or evidencing the same or under which the same is outstanding it is provided that this indebtedness is not senior or prior in right of payment to the subordinated debt securities; and
- renewals, extensions, modifications and refinancings of any of such indebtedness.

The prospectus supplement accompanying any series of indenture securities denominated as subordinated debt securities will set forth the approximate amount of our Senior Indebtedness outstanding as of a recent date.

Trustee

We intend to name the indenture trustee for each series of indenture securities in the related prospectus supplement.

Certain Considerations Relating to Foreign Currencies

Debt securities denominated or payable in foreign currencies may entail significant risks. These risks include the possibility of significant fluctuations in the foreign currency markets, the imposition or modification of foreign exchange controls and potential illiquidity in the secondary market. These risks will vary depending upon the currency or currencies involved and will be more fully described in the applicable prospectus supplement.

DESCRIPTION OF RIGHTS

The following is a general description of the terms of the rights we may issue from time to time unless we provide otherwise in the applicable prospectus supplement. Particular terms of any rights we offer will be described in the prospectus supplement relating to such rights.

General

We may issue rights to purchase common stock, preferred stock, debt securities or units. Rights may be issued independently or together with other securities and may or may not be transferable by the person purchasing or receiving the rights. In connection with any rights offering to our stockholders, we may enter into a standby underwriting, backstop or other arrangement with one or more underwriters or other persons pursuant to which such underwriters or other persons would purchase any offered securities remaining unsubscribed for after such rights offering. In connection with a rights offering to our stockholders, we would distribute certificates evidencing the rights and a prospectus supplement to our stockholders on or about the record date that we set for receiving rights in such rights offering.

The applicable prospectus supplement will describe the following terms of any rights we may issue, including some or all of the following:

- the title and aggregate number of the rights;
- the subscription price or a formula for the determination of the subscription price for the rights and the currency or currencies in which the subscription price may be payable;
- if applicable, the designation and terms of the securities with which the rights are issued and the number of rights issued with each such security or each principal amount of such security;
- the number or a formula for the determination of the number of the rights issued to each stockholder;
- the extent to which the rights are transferable;

- in the case of rights to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one right;
- in the case of rights to purchase common stock or preferred stock, the type of stock and number of shares of stock purchasable upon exercise of one right;
- the date on which the right to exercise the rights will commence, and the date on which the rights will expire (subject to any extension);
- if applicable, the minimum or maximum amount of the rights that may be exercised at any one time;
- the extent to which such rights include an over-subscription privilege with respect to unsubscribed securities;
- if applicable, the procedures for adjusting the subscription price and number of shares of common stock or preferred stock purchasable upon the exercise of each right upon the occurrence of certain events, including stock splits, reverse stock splits, combinations, subdivisions or reclassifications of common stock or preferred stock;
- the effect on the rights of any merger, consolidation, sale or other disposition of our business;
- the terms of any rights to redeem or call the rights;
- information with respect to book-entry procedures, if any;
- the terms of the securities issuable upon exercise of the rights;
- if applicable, the material terms of any standby underwriting, backstop or other purchase arrangement that we may enter into in connection with the rights offering;
- if applicable, a discussion of certain U.S. Federal income tax considerations; and
- any other terms of the rights, including terms, procedures and limitations relating to the exchange and exercise of the rights.

Exercise of Rights

Each right will entitle the holder to purchase for cash or other consideration such shares of stock or principal amount of securities at the subscription price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the rights offered thereby. Rights may be exercised as set forth in the applicable prospectus supplement beginning on the date specified therein and continuing until the close of business on the expiration date set forth in the prospectus supplement relating to the rights offered thereby. After the close of business on the expiration date, unexercised rights will become void.

Upon receipt of payment and a subscription certificate properly completed and duly executed at the corporate trust office of the subscription agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the securities purchasable upon such exercise. If less than all of the rights represented by such subscription certificate are exercised, a new subscription certificate will be issued for the remaining rights. If we so indicate in the applicable prospectus supplement, holders of the rights may surrender securities as all or part of the exercise price for rights.

We may determine to offer any unsubscribed offered securities directly to stockholders, persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting, backstop or other arrangements, as set forth in the applicable prospectus supplement.

Prior to exercising their rights, holders of rights will not have any of the rights of holders of the securities purchasable upon subscription, including, in the case of rights to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise any voting rights or, in the case of rights to purchase debt securities, the right to receive principal, premium, if any, or interest payments, on the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture.

DESCRIPTION OF UNITS

We may issue units comprising one or more securities described in this prospectus in any combination. The following description sets forth certain general terms and provisions of the units that we may offer pursuant to this prospectus. The particular terms of the units and the extent, if any, to which the general terms and provisions may apply to the units so offered will be described in the applicable prospectus supplement.

Each unit will be issued so that the holder of the unit also is the holder of each security included in the unit. Thus, the unit will have the rights and obligations of a holder of each included security. Units will be issued pursuant to the terms of a unit agreement, which 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. A copy of the forms of the unit agreement and the unit certificate relating to any particular issue of units will be filed with the SEC each time we issue units, and you should read those documents for provisions that may be important to you. For more information on how you can obtain copies of the forms of the unit agreement and the related unit certificate, see “Where You Can Find More Information.”

The prospectus supplement relating to any particular issuance of units will describe the terms of those units, including, to the extent applicable, the following:

- the designation and terms of the units and the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provision for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- whether the units will be issued in fully registered or global form.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus in any one or more of the following ways from time to time:

- to or through one or more underwriters, initial purchasers, brokers or dealers;
- through agents to investors or the public;
- in short or long transactions;
- through put or call option transactions relating to our common stock;
- directly to agents or other purchasers;
- in “at the market offerings” within the meaning of Rule 415(a)(4) of the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- though a combination of any such methods of sale; or
- through any other method described in the applicable prospectus supplement.

The applicable prospectus supplement will set forth the terms of the offering and the method of distribution and will identify any firms acting as underwriters, initial purchasers, dealers or agents in connection with the offering, including:

- the terms of the offering;
- the names of any underwriters, dealers or agents;
- the name or names of any managing underwriter or underwriters;

- the purchase price of the securities and the proceeds to us from the sale;
- any over-allotment options under which the underwriters may purchase additional shares of common stock from us;
- any underwriting discounts, concessions, commissions or agency fees and other items constituting compensation to underwriters, dealers or agents;
- any delayed delivery arrangements;
- any public offering price;
- any discounts or concessions allowed or re-allowed or paid by underwriters or dealers to other dealers; or
- any securities exchange or market on which the common stock offered in the prospectus supplement may be listed.

If we use underwriters for a sale of securities, the underwriters will acquire the securities for their own account for resale to the public, either on a firm commitment basis or a best efforts basis. The underwriters may resell the securities in one or more transactions, including negotiated transactions, at a fixed public offering price or at varying prices determined at the time of sale. Underwriters may offer the securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. If an underwriter or underwriters are used in the sale of securities hereunder, an underwriting agreement will be executed with the underwriter or underwriters at the time an agreement for sale is reached. Unless we inform you otherwise in the applicable prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions. We may change from time to time any public offering price and any discounts or concessions the underwriters allow or pay to dealers.

During and after an offering through underwriters, the underwriters may purchase and sell the securities in the open market. These transactions may include overallotment and stabilizing transactions and purchases to cover syndicate short positions created in connection with the offering. The underwriters may also impose a penalty bid, which means that selling concessions allowed to syndicate members or other broker-dealers for the offered securities sold for their account may be reclaimed by the syndicate if the offered securities are repurchased by the syndicate in stabilizing or covering transactions. These activities may stabilize, maintain or otherwise affect the market price of the offered securities, which may be higher than the price that might otherwise prevail in the open market. If commenced, the underwriters may discontinue these activities at any time.

Some or all of the securities that we offer though this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell our securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities that we offer.

If dealers are used for the sale of securities, we, or an underwriter, will sell the securities to them as principals. The dealers may then resell those securities to the public at varying prices determined by the dealers at the time of resale. We will include in the applicable prospectus supplement the names of the dealers and the terms of the transaction.

We may also sell the securities through agents designated from time to time. In the applicable prospectus supplement, we will name any agent involved in the offer or sale of the offered securities, and we will describe any commissions payable to the agent. Unless we inform you otherwise in the applicable prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly in transactions not involving underwriters, dealers or agents.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. We will describe the terms of any such sales in the prospectus supplement.

Underwriters, dealers and agents that participate in the distribution of the securities may be underwriters as defined in the applicable securities laws and any discounts or commissions they receive from us and any profit on their resale of the securities may be treated as underwriting discounts and commissions under the applicable securities laws. We will identify in the applicable prospectus supplement any underwriters, dealers or agents and will describe their compensation. We may have agreements with the underwriters, dealers and agents to indemnify them against specified civil liabilities, including liabilities under the applicable securities laws.

Underwriters, dealers and agents may engage in transactions with or perform services for us in the ordinary course of their businesses for which they may receive customary fees and reimbursement of expenses.

We may use underwriters with whom we have a material relationship. We will describe the nature of such relationship in the applicable prospectus supplement.

Under the securities laws of some states, the securities offered by this prospectus may be sold in those states only through registered or licensed brokers or dealers.

We may enter into hedging transactions with broker-dealers and the broker-dealers may engage in short sales of the securities in the course of hedging the positions they assume with us, including, without limitation, in connection with distributions of the securities by those broker-dealers. We may enter into option or other transactions with broker-dealers that involve the delivery of the securities offered hereby to the broker-dealers, who may then resell or otherwise transfer those securities. We may also loan or pledge the securities offered hereby to a broker-dealer and the broker-dealer may sell the securities offered hereby so loaned or upon a default may sell or otherwise transfer the pledged securities offered hereby.

LEGAL MATTERS

The validity of the securities being offered hereby will be passed upon for us by DLA Piper LLP (US), Short Hills, New Jersey.

EXPERTS

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

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy and information statements and other information with the Securities and Exchange Commission. The SEC maintains a website that contains reports, proxy statements and other information regarding us. The address of the SEC website is www.sec.gov. We maintain a website at www.axsome.com. Information contained on our website is not incorporated into this prospectus and you should not consider information contained on our website to be part of this prospectus or any prospectus supplement.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information contained in documents that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC before the date of this prospectus, while information that we file later with the SEC will automatically update and supersede prior information. Any information so updated and superseded shall not be deemed, except as so updated and superseded, to constitute a part of this prospectus. We incorporate by reference the documents listed below and any future filings we will make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, prior to the termination of the offering. Notwithstanding the foregoing, unless specifically stated to the contrary, none of the information that is not deemed "filed" with the SEC, including information furnished under Items 2.02 or 7.01 of any Current Report on Form 8-K, will be incorporated by reference into, or otherwise included in, this prospectus:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 filed with the SEC on March 15, 2019;
- the information contained in our definitive proxy statement on Schedule 14A for our 2019 annual meeting of stockholders filed with the SEC on April 26, 2019, to the extent incorporated by reference in Part III of the Form 10-K for the fiscal year ended December 31, 2018;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 filed with the SEC on May 9, 2019;
- our Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 filed with the SEC on August 8, 2019;
- our Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 filed with the SEC on November 7, 2019;
- our Current Reports on Form 8-K filed with the SEC on January 7, 2019 (two filings); January 8, 2019; January 30, 2019; February 6, 2019; March 4, 2019; March 6, 2019; March 14, 2019; March 27, 2019; April 15, 2019; May 6, 2019; May 9, 2019 (two filings); June 7, 2019; June 24, 2019; July 11, 2019; July 29, 2019; August 8, 2019; August 20, 2019; September 5, 2019; October 2, 2019; October 16, 2019; October 21, 2019; October 28, 2019 (two filings); November 7, 2019 (two filings) and December 3, 2019; and
- the description of our common stock contained in our registration statement on Form 8 A12B, filed with the SEC on November 16, 2015 (File No. 001-37635), and all amendments or reports filed for the purpose of updating such description.

We make available, free of charge, through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part. We will provide, upon written or oral request, to each person to whom a prospectus is delivered, including any beneficial owner, a copy of any or all of the information that has been incorporated by reference in the prospectus but not delivered with the prospectus (other than exhibits to these documents unless the exhibits are specifically incorporated by reference into these documents or referred to in this prospectus), free of charge, by writing or calling us at the following address and telephone number:

Axsome Therapeutics, Inc.
200 Broadway
3rd Floor
New York, New York 10038
(212) 332-3241

Common Stock
Preferred Stock
Warrants
Debt Securities
Rights to Purchase Common Stock, Preferred Stock, Debt Securities or Units
Units

PROSPECTUS

December 5, 2019

Up to $80,000,000

Axsome Therapeutics, Inc.

Common Stock

We have entered into a sales agreement, or the Sales Agreement, with SVB Leerink LLC, or SVB Leerink, dated December 5, 2019, relating to shares of our common stock, par value $0.0001 per share, offered by this prospectus. In accordance with the terms of the Sales Agreement, we may offer and sell shares of our common stock having an aggregate offering price of up to $80.0 million from time to time through SVB Leerink, acting as our agent.

Our common stock is listed on the Nasdaq Global Market under the symbol "AXSM." On December 3, 2019, the last reported sale price of our common stock was $45.61 per share.

Sales of our common stock, if any, under this prospectus will be made in sales deemed to be "at the market offerings" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act. SVB Leerink is not required to sell any specific number or dollar amount of shares of our common stock, but will act as our sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between SVB Leerink and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The compensation payable to SVB Leerink for sales of common stock sold pursuant to the Sales Agreement will be an amount equal to 3.0% of the gross proceeds of any shares of common stock sold under the Sales Agreement. See "Plan of Distribution" beginning on page S-10 for additional information regarding the compensation to be paid to SVB Leerink. In connection with the sale of the common stock on our behalf, SVB Leerink will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation paid to SVB Leerink will be deemed to be underwriting commissions or discounts. We have also agreed in the Sales Agreement to provide indemnification and contribution to SVB Leerink with respect to certain liabilities, including liabilities under the Securities Act or the Securities Exchange Act of 1934, as amended.

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.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page S-5 of this prospectus and the risk factors in the documents incorporated by reference in 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.

SVB Leerink

The date of this prospectus is December 5, 2019

TABLE OF CONTENTS

Neither we nor SVB Leerink have authorized anyone to provide any information or to make any representations other than those contained or incorporated by reference in this prospectus or in any free writing prospectus that we have authorized for use in connection with this offering. We and SVB Leerink take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus consitutes an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus and any free writing prospectus that we have authorized for use in connection with this offering is current only as of its date. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus, the documents incorporated by reference herein, and any free writing prospectus that we have authorized for use in connection with this offering when making your investment decision. You should also read and consider the information in the documents we have referred you to in the sections of this prospectus entitled "Where You Can Find More Information" and "Information Incorporated by Reference."

ABOUT THIS PROSPECTUS

This prospectus forms part of an automatic "shelf" registration statement on Form S-3ASR that we filed with the Securities and Exchange Commission, or SEC, as a "well-known seasoned issuer" as defined in Rule 405 under the Securities Act of 1933, as amended, or the Securities Act. By using a shelf registration statement, we may offer shares of our common stock having an aggregate offering price of up to $80,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of offering.

This prospectus describes the terms of this offering of common stock and also adds to and updates information contained in the documents incorporated by reference into this prospectus. To the extent there is a conflict between the information contained in this prospectus, on the one hand, and the information contained in any document incorporated by reference into this prospectus that was filed with the SEC before the date of this prospectus, on the other hand, you should rely on the information in this prospectus. However, if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in this prospectus—the statement in the document having the later date modifies or supersedes the earlier statement as our business, financial condition, results of operations and prospects may have changed since the earlier dates.

You should rely only on the information that we have included or incorporated by reference in this prospectus and any related free writing prospectus that we have authorized for use in connection with this offering. Neither we nor SVB Leerink have authorized any dealer, salesman or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus or any related free writing prospectus that we have authorized for use in connection with this offering.

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.

This prospectus and any related free writing prospectus do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus or any related free writing prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus or any related free writing prospectus is accurate on any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference herein or therein is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus or any related free writing prospectus is delivered, or securities are sold, on a later date. You should assume that the information appearing in this prospectus, 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 contains or incorporates by reference summaries of certain provisions contained in some of the documents described herein, but all such summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been or will be filed or have been or will be incorporated by reference into this prospectus, and you may obtain copies of those documents as described in this prospectus under the heading "Where You Can Find More Information" or "Information Incorporated by Reference."

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain matters discussed in this prospectus including matters discussed under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations," incorporated by reference herein from our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q for the quarterly periods ended subsequent to our filing of such Annual Report on Form 10-K, may constitute forward-looking statements for purposes of the Securities Act and the Securities Exchange Act of 1934, as amended, or the Exchange Act, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from the future results, performance or achievements expressed or implied by such forward-looking statements. We may, in some cases, use terms such as "predicts," "believes," "potential," "continue," "estimates," "anticipates," "expects," "plans," "intends," "may," "could," "might," "will," "should" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. Our actual results may differ materially from the results anticipated in these forward-looking statements due to a variety of factors, including, without limitation, those discussed under the headings "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this prospectus and the documents incorporated by reference herein, as well as other factors which may be identified from time to time in our other filings with the SEC, or in the documents in which such forward-looking statements appear. All written or oral forward-looking statements attributable to us are expressly qualified in their entirety by these cautionary statements.

In particular, our statements regarding trends and potential future results are examples of such forward-looking statements. The forward-looking statements include risks and uncertainties, including, but not limited to, our expectations regarding sales of our common stock pursuant to the Sales Agreement; the success, timing and cost of our ongoing clinical trials and anticipated clinical trials for our current product candidates, including statements regarding the timing of initiation and completion of the trials, futility analyses and receipt of interim results; the timing of and our ability to obtain and maintain regulatory approval from the U.S. Food and Drug Administration, European Medicines Agency or other regulatory authority, or other anticipated regulatory action with respect to, our current or future product candidates; our ability to obtain additional capital necessary to fund our operations and our expectations relating to future capital requirements; our ability to generate revenues in the future; our ability to defend our intellectual property successfully or obtain the necessary licenses at a cost acceptable to us, if at all; the successful implementation of our research and development programs; the enforceability and success of our license agreements; the acceptance by the market of our product candidates, if approved; and other factors, including general economic conditions and regulatory developments, not within our control and discussed under the heading "Risk Factors," including those risk factors that are incorporated by reference in this prospectus.

The forward-looking statements contained in this prospectus reflect our views and assumptions only as of the date of this prospectus. Except as required by law, we assume no responsibility for updating any forward-looking statements.

We qualify all of our forward-looking statements by these cautionary statements. In addition, with respect to all of our forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in, or incorporated by reference into, this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in shares of our common stock and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus, any free writing prospectus that we have authorized for use in connection with this offering and the documents incorporated by reference in this prospectus. You should read all such documents carefully and you should pay special attention to the information contained under the caption entitled "Risk Factors" in this prospectus, in our Annual Reports on Form 10-K, in any subsequent Quarterly Reports on Form 10-Q and in our other reports filed from time to time with the SEC, which are incorporated by reference into this prospectus, before deciding to buy shares of our common stock. Unless the context requires otherwise, references in this prospectus to "Axsome," "we," "us" and "our" refer to Axsome Therapeutics, Inc. and our subsidiaries.

Company Overview

We are a clinical-stage biopharmaceutical company developing novel therapies for the management of central nervous system, or CNS, disorders for which there are limited treatment options. By focusing on this therapeutic area, we are addressing significant and growing markets where current treatment options are limited or inadequate. Our core CNS portfolio includes four CNS product candidates, AXS-05, AXS-07, AXS-09, and AXS-12, which are being developed for multiple indications. AXS-05 is currently in a Phase 3 trial in treatment resistant depression, or TRD, which we refer to as the STRIDE-1 study, a Phase 3 trial in major depressive disorder, or MDD, which we refer to as the GEMINI study, a Phase 3 open-label safety trial in patients with TRD and MDD; and a Phase 2/3 trial in agitation associated with Alzheimer's disease, or AD, which we refer to as the ADVANCE-1 study. We have completed a Phase 2 trial in MDD, which we refer to as the ASCEND study and a Phase 2 trial in smoking cessation. AXS-07 is currently in two Phase 3 trials for the acute treatment of migraine, which we refer to as the MOMENTUM and the INTERCEPT studies, and a Phase 3 open-label safety trial in patients with migraine. AXS-12 is being developed for the treatment of narcolepsy. We have completed a Phase 2 trial, which we refer to as the CONCERT study. The Axsome Pain and Primary Care business unit, or Axsome PPC, houses our pain and primary care assets, including AXS-02 and AXS-06, and intellectual property which covers these and related product candidates and molecules being developed by us and others. AXS-02 is being developed for the treatment of knee osteoarthritis, or OA, associated with bone marrow lesions, or BMLs. AXS-06 is being developed for the treatment of osteoarthritis and rheumatoid arthritis and for the reduction of the risk of nonsteroidal anti-inflammatory drug, or NSAID, associated gastrointestinal ulcers. Additionally, we are currently evaluating other product candidates, which we intend to develop for CNS disorders. We aim to become a fully integrated biopharmaceutical company that develops and commercializes differentiated therapies that expand the treatment options available to caregivers and improve the lives of patients living with CNS disorders.

AXS-05 is a novel, oral, investigational NMDA receptor antagonist with multimodal activity under development for the treatment of CNS disorders. AXS-05 consists of bupropion and dextromethorphan, or DM, and utilizes our metabolic inhibition technology. We are developing AXS-05 initially for the following four indications: TRD, agitation associated with AD, MDD, and as an aid to smoking cessation. The DM component of AXS-05 is a non-competitive N-methyl-D-aspartate, or NMDA, receptor antagonist, also known as a glutamate receptor modulator. The DM component of AXS-05 is also a sigma-1 receptor agonist, nicotinic acetylcholine receptor antagonist, and inhibitor of the serotonin and norepinephrine transporters. The bupropion component of AXS-05 serves to increase the bioavailability of dextromethorphan, and is a norepinephrine and dopamine reuptake inhibitor, and a nicotinic acetylcholine receptor antagonist. We intend to seek U.S. Food and Drug Administration, or FDA, approval for AXS-05 utilizing the 505(b)(2) regulatory development pathway.

AXS-07 is a novel, oral, investigational medicine with distinct dual mechanisms of action consisting of MoSEIC™, or Molecular Solubility Enhanced Inclusion Complex, meloxicam and rizatriptan. We are developing AXS-07 initially for the acute treatment of migraine. Meloxicam is a long-acting nonsteroidal anti-inflammatory drug, or NSAID, with COX-2, an enzyme involved in inflammation and pain pathways, preferential inhibition and potent pain-relieving effects. However, standard meloxicam has an extended time to maximum plasma concentration, or T_{max}, which delays its onset of action. AXS-07 utilizes our proprietary MoSEIC™ technology to substantially increase the solubility and speed the absorption of meloxicam while potentially maintaining durability of action. Meloxicam is a new molecular entity for migraine enabled by our MoSEIC™ technology. Rizatriptan is a 5-$HT_{1B/D}$ agonist that inhibits calcitonin gene-related peptide, or CGRP-mediated vasodilation, has been shown to have central trigeminal antinociceptive activity, and may reduce the release of inflammatory mediators from trigeminal nerves. Rizatriptan is approved as a single agent for the acute treatment of migraine. We intend to seek FDA approval for AXS-07 utilizing the 505(b)(2) regulatory development pathway.

AXS-09 is a novel, oral, investigational medicine consisting of esbupropion and DM, which is being developed for the treatment of CNS disorders. AXS-09 contains esbupropion, the chirally pure *S*-enantiomer of bupropion, as compared to the company's first generation product candidate AXS-05 which contains racemic bupropion, equal amounts of the *S*- and *R*-enantiomers. We have demonstrated in a Phase 1 trial that DM plasma levels are substantially increased into a potentially therapeutic range with repeated administration of AXS-09. Results of this Phase 1 trial coupled with preclinical data also indicate the potential for enhanced absorption and therapeutic effect of the *S*-enantiomer as compared to the *R*-enantiomer.

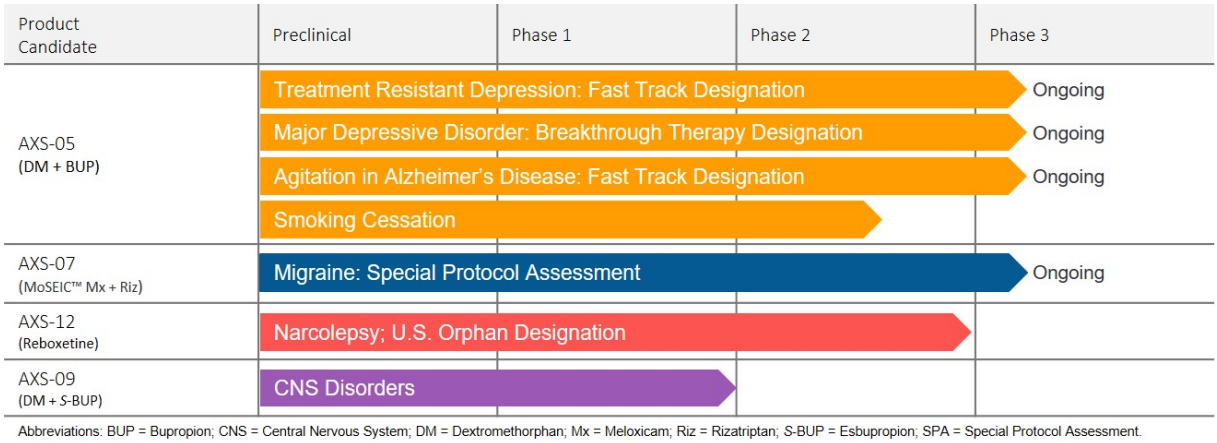
AXS-12, reboxetine, is a novel, oral, investigational medicine in development for treatment of narcolepsy. AXS-12 is a highly selective and potent norepinephrine reuptake inhibitor. The potential utility of AXS-12 in narcolepsy is supported by positive pre-clinical and clinical results in narcolepsy, and an extensive positive clinical safety record. Reboxetine, the active agent in AXS-12, significantly and dose-dependently reduced narcoleptic episodes in hypocretin, or orexin-deficient mice, a well-established genetic animal model of narcolepsy.

The Axsome PPC unit houses Axsome's pain and primary care assets, including AXS-02 and AXS-06, and intellectual property which covers these and related product candidates and molecules being developed by Axsome and others. AXS-02 is being developed for the treatment of knee osteoarthritis, or OA, associated with bone marrow lesions, or BMLs, and chronic low back pain, or CLBP, associated with Modic changes, or MCs. AXS-06 is being developed for the treatment of osteoarthritis and rheumatoid arthritis and for the reduction of the risk of NSAID-associated gastrointestinal ulcers.

AXS-02, disodium zoledronate tetrahydrate, is a potentially first-in-class, oral, targeted, non-opioid therapeutic for chronic pain. AXS-02 is a potent inhibitor of osteoclasts, which are bone remodeling cells that break down bone tissue. We are developing AXS-02 for the treatment of pain in the following two conditions: knee OA associated with BMLs and CLBP associated with type 1 or mixed type 1 and type 2 MCs. These conditions exhibit target lesions or specific pathology that we believe may be addressed by the mechanisms of action of AXS-02, such as inhibition of osteoclast activity. These mechanisms may result in a reduction of pain in these conditions. We intend to seek FDA approval for AXS-02 utilizing the 505(b)(2) regulatory development pathway.

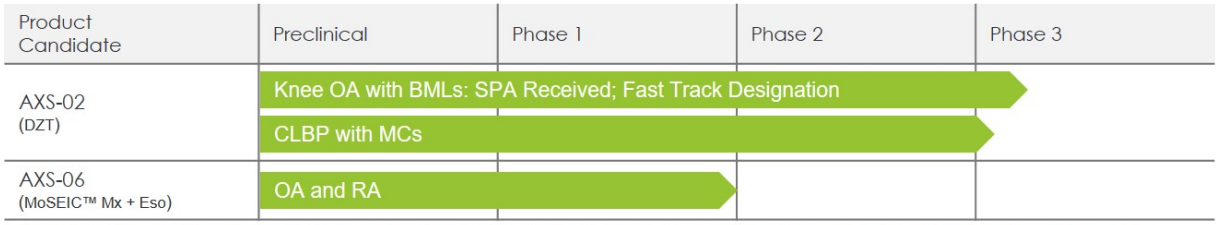
AXS-06 is a novel, oral, non-opioid, fixed-dose combination of MoSEIC™ meloxicam and esomeprazole. We are developing AXS-06 initially for the treatment of osteoarthritis and rheumatoid arthritis. Esomeprazole is a proton pump inhibitor which lowers stomach acidity and which has been shown to reduce the occurrence of NSAID-associated gastrointestinal ulcers. AXS-06 is designed to provide rapid, effective pain relief, and to reduce the risk of NSAID-associated gastrointestinal ulcers, with convenient once-daily dosing. We have successfully completed a Phase 1 trial of AXS-06 to characterize the pharmacokinetics of meloxicam and esomeprazole after oral administration of AXS-06. The results of our Phase 1 trial demonstrated that the median T_{max} for meloxicam, the trial's primary endpoint, was nine times faster for AXS-06 as compared to standard meloxicam. We intend to seek FDA approval for AXS-06 utilizing the 505(b)(2) regulatory development pathway.

Our current CNS product candidate pipeline is summarized in the table below:



Abbreviations: BUP = Bupropion; CNS = Central Nervous System; DM = Dextromethorphan; Mx = Meloxicam; Riz = Rizatriptan; *S*-BUP = Esbupropion; SPA = Special Protocol Assessment.

Additionally, our PPC product candidate pipeline is summarized in the table below:



Abbreviations: BML = Bone Marrow Lesions; CLBP = Chronic Low Back Pain; DZT = Disodium Zoledronate Tetrahydrate; Eso = Esomeprazole; MC = Modic Changes; Mx = Meloxicam; OA = Osteoarthritis; RA = Rheumatoid Arthritis; SPA = Special Protocol Assessment

Corporate Information

We were incorporated under the laws of the State of Delaware in January 2012. Our principal executive offices are located at 200 Broadway, 3rd Floor, New York, New York 10038, and our telephone number is (212) 332-3241.

Information concerning our business and our prospects is included in the documents that we file with the SEC as a reporting company under the Exchange Act, which are accessible at *www.sec.gov*, and on our website at *www.axsome.com*. The information contained on, or that can be accessed through, our website is not a part of this prospectus. Investors should not rely on any such information in deciding whether to purchase our common stock. We have included our website address in this prospectus solely as an inactive textual reference.

Implications of Being an Emerging Growth Company

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of relief from certain reporting requirements and other burdens that are otherwise generally applicable to public companies. These provisions include:

- requirement for only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- exemption from the auditor attestation requirement on the effectiveness of our internal controls over financial reporting;
- reduced disclosure about our executive compensation arrangements; and
- no requirements for non-binding advisory votes on executive compensation or golden parachute arrangements.

We may take advantage of these provisions until December 31, 2020 or such earlier time that we no longer qualify as an emerging growth company. We would cease to be an emerging growth company if we have more than $1.07 billion in total annual gross revenue, have more than $700 million in market value of our capital stock held by non-affiliates or 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 these reduced reporting requirements and other burdens. We have taken advantage of some reduced reporting burdens in this prospectus and the documents incorporated by reference herein and therein. Accordingly, the information that we provide stockholders may be different than what you might obtain from other public companies in which you hold equity interests.

THE OFFERING

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to $80.0 million.
Manner of offering	"At the market offering" that may be made from time to time through our sales agent, SVB Leerink LLC. See "Plan of Distribution" on page S-20.
Use of proceeds	We intend to use the net proceeds from this offering to continue to fund the ongoing clinical development of our late stage product candidates and for other general corporate purposes, including funding existing and potential new clinical programs and product candidates. See "Use of Proceeds."
Risk factors	Investing in our common stock involves a high degree of risk. You should read the "Risk Factors" section of this prospectus beginning on page S-5 as well as those risk factors that are incorporated by reference in this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Nasdaq Global Market symbol	AXSM

RISK FACTORS

An investment in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should carefully consider the risks described below and those discussed under the caption entitled "Risk Factors" in our Annual Reports on Form 10-K and any subsequent Quarterly Reports on Form 10-Q, which are incorporated by reference in this prospectus, together with other information in this prospectus, the information and documents incorporated by reference herein, and in any free writing prospectus that we have authorized for use in connection with this offering. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.

Risks Related to this Offering

We have incurred significant losses since our inception, anticipate that we will incur substantial and increasing losses for the foreseeable future, and may never achieve or maintain profitability, which would depress the market price of our common stock, and could cause you to lose all or a part of your investment.

We are a clinical stage biopharmaceutical company with a limited operating history. For the last several years, we have focused our efforts primarily on developing CNS product candidates, AXS-05, AXS-07, AXS-09 and AXS-12, as well as our Axsome PPC product candidates, AXS-02 and AXS-06, which we refer to herein as our product candidates, with the goal of achieving regulatory approval. Since inception, we have incurred significant operating losses. Our net losses were $43.5 million and $31.0 million for nine months ended September 30, 2019 and the year ended December 31, 2018, respectively. As of September 30, 2019, we had an accumulated deficit of $151.1 million. To date, we have not received regulatory approvals for any of our product candidates or generated any revenue from the sale of products, and we do not expect to generate any revenue in the foreseeable future. We expect to continue to incur substantial and increasing expenses and operating losses over the next several years, as we continue to develop our current and future product candidates. In addition, we expect to incur significant sales, marketing, and manufacturing expenses related to the commercialization of our current and future product candidates, if they are approved by the U.S. Food and Drug Administration, or FDA. As a result, we expect to continue to incur significant losses for the foreseeable future. We anticipate that our expenses will increase substantially as we:

- conduct our Phase 3 clinical trials with AXS-05 for the treatment of depression;
- conduct our open-label safety extension trial for AXS-05;
- conduct our Phase 2/3 clinical trials with AXS-05 for the treatment of agitation associated with Alzheimer’s disease, or AD agitation;
- conduct our two Phase 3 clinical trials with AXS-07 for the acute treatment of migraine;
- conduct our open-label safety extension trial for AXS-07;
- conduct our planned Phase 3 clinical trial with AXS-12 in narcolepsy;
- continue to evaluate, plan for, and conduct, clinical trials for AXS-05 for smoking cessation treatment and AXS-09 for the treatment of CNS disorders;
- continue to evaluate, plan for, and conduct, clinical trials for our Axsome PPC product candidates, including AXS-02 for the treatment of pain associated with knee osteoarthritis, or OA, associated with bone marrow lesions, or BMLs and AXS-06 for the treatment of osteoarthritis and rheumatoid arthritis;
- develop, in-license, or acquire additional product candidates;
- conduct late-stage clinical trials for any product candidates that successfully complete early-stage clinical trials;
- seek regulatory approval for any product candidates that successfully complete late-stage clinical trials;
- conduct additional non-clinical studies with any product candidates;
- conduct clinical studies with any additional product candidates;
- increase manufacturing batch sizes of our product candidates to satisfy FDA requirements for a marketing application submission;
- establish a sales, marketing, and distribution infrastructure, and scale up external manufacturing capabilities to commercialize any products for which we may obtain regulatory approval and that we choose not to license to a third party;
- require larger quantities of product;
- maintain, expand, and protect our intellectual property portfolio;

- hire additional clinical, quality control, and scientific personnel; and
- add operational, financial, and management information systems and personnel, including personnel to support our product candidate development and planned future commercialization efforts.

To become and remain profitable, we must succeed in developing and eventually commercializing products that generate significant revenue. We do not expect to generate significant revenue unless and until we are able to obtain marketing approval for and successfully commercialize one or more of our product candidates. This will require us to be successful in a range of challenging activities, including completing preclinical testing and clinical trials of our product candidates, discovering additional product candidates, potentially entering into collaboration and license agreements, obtaining regulatory approval for product candidates and manufacturing, marketing and selling any products for which we may obtain regulatory approval, achieving market acceptance of our products, satisfying any post-marketing requirements, maintaining appropriate distribution, setting prices, and obtaining reimbursement for our products from private insurance or government payors. We are only in the preliminary stages of some of these activities. We may never succeed in these activities and, even if we do, may never achieve profitability.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses we may incur or when, or if, we will be able to achieve profitability. If we are required by the FDA or comparable foreign regulatory authorities to perform studies in addition to those currently expected, or if there are any delays in completing our clinical trials or the development of any of our product candidates, our expenses could increase.

Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product offerings, or even continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

We will need additional funding to conduct our future clinical trials and to complete development and commercialization of our product candidates. If we are unable to raise capital when needed, we would be forced to delay, reduce, or eliminate our product development programs or commercialization efforts.

Conducting clinical trials, pursuing regulatory approvals, establishing outsourced manufacturing relationships, and successfully manufacturing and commercializing our product candidates is, and will be, a very time-consuming, expensive, and uncertain process that takes years to complete. We will need to raise additional capital to:

- fund our future clinical trials for our current product candidates, especially if we encounter any unforeseen delays or difficulties in our planned development activities;
- fund our operations and continue our efforts to hire additional personnel and build a commercial infrastructure to prepare for the commercialization of our current and future product candidates, if approved by the FDA or other comparable foreign regulatory authorities;
- qualify and outsource the commercial-scale manufacturing of our products under current good manufacturing practices;
- develop additional product candidates; and
- in-license other product candidates.

We may not have sufficient financial resources to meet all of our objectives if any of our product candidates is approved by regulatory authorities, which could require us to postpone, scale back or eliminate some or all of these objectives, including our potential launch activities relating to our product candidates. Our future funding requirements will depend on many factors, including, but not limited to:

- the rate of progress and costs related to the development of our product candidates;
- the costs associated with conducting additional non-clinical studies with any of our product candidates;
- the potential for delays in our efforts to seek regulatory approval for our product candidates, and any costs associated with such delays;
- the costs of establishing a commercial organization to sell, market and distribute our product candidates;

- the rate of progress and costs of our efforts to prepare for the submission of a new drug application for any product candidates that we may in-license or acquire in the future, and the potential that we may need to conduct additional clinical or preclinical trials to support applications for regulatory approval;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights associated with our product candidates;
- the cost and timing of manufacturing sufficient supplies of our product candidates in preparation for commercialization;
- the effect of competing technological and market developments;
- revenue, if any, received from commercial sales of our product candidates, subject to the receipt of regulatory approval;
- the terms and timing of any collaborative, licensing, co-promotion or other arrangements that we may establish; and
- the success of the commercialization of any of our current or future product candidates.

Future capital requirements will also depend on the extent to which we acquire or invest in additional businesses, products, and technologies. Until we can generate a sufficient amount of product revenue, if ever, we expect to finance future cash needs through public or private equity offerings, debt financings, royalties, and corporate collaboration and licensing arrangements, as well as through interest income earned on cash and investment balances. We cannot be certain that additional funding will be available on acceptable terms, or at all. If adequate funds are not available, we may be required to delay, reduce the scope of, or eliminate one or more of our development programs or our commercialization efforts.

Management will have broad discretion as to the use of any proceeds from this offering, and we may not use the proceeds effectively.

Our management will have broad discretion with respect to the use of any proceeds of this offering, including for any of the purposes described in "Use of Proceeds." You will be relying on the judgment of our management regarding the application of any proceeds of this offering. The results and effectiveness of the use of proceeds are uncertain, and we could spend the proceeds in ways that you do not agree with or that do not improve our results of operations or enhance the value of our common stock. Our failure to apply these funds effectively could have a material adverse effect on our business, delay the development of our product candidates and cause the price of our common stock to decline.

It is not possible to predict the aggregate proceeds resulting from sales made under the Sales Agreement.

Subject to certain limitations in the Sales Agreement and compliance with applicable law, we have the discretion to deliver a placement notice to SVB Leerink at any time throughout the term of the Sales Agreement. The number of shares that are sold through SVB Leerink after delivering a placement notice will fluctuate based on a number of factors, including the market price of our common stock during the sales period, any limits we may set with SVB Leerink in any applicable placement notice and the demand for our common stock. Because the price per share of each share sold pursuant to the Sales Agreement will fluctuate over time, it is not currently possible to predict the aggregate proceeds to be raised in connection with sales under the sales agreement.

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 accordingly may experience different levels of dilution and different outcomes in their investment results. We will have discretion, subject to market demand, to vary the timing, prices and number of shares sold in this offering. In addition, subject to the final determination by our board of directors or any restrictions we may place in any applicable placement notice, there is no minimum or maximum sales price for shares to be sold in this offering. Investors may experience a decline in the value of the shares they purchase in this offering as a result of sales made at prices lower than the prices they paid.

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

The offering price per share of common stock in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Therefore, if you purchase common stock in this offering, you may pay a price per share that exceeds our as adjusted net tangible book value per share of common stock. Assuming that an aggregate of 1,754,001 shares of our common stock are sold at an assumed offering price of $45.61 per share, the last reported sale price of our common stock on the Nasdaq Global Market on December 3, 2019, for aggregate gross proceeds of $80.0 million, and after deducting commissions and estimated offering expenses payable by us, you would experience immediate dilution of $43.29 per share, representing the difference between our as adjusted net tangible book value per share as of September 30, 2019, after giving effect to this offering, and the assumed offering price. To the extent outstanding options or warrants are exercised, you will experience further dilution. See the section titled "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering. Because the sales of the shares offered hereby will be made directly into the market, the prices at which we sell these shares will vary and these variations may be significant. Purchasers of the shares we sell, as well as our existing shareholders, will experience significant dilution if we sell shares at prices significantly below the price at which they invested.

Future sales and issuances of our common stock or rights to purchase common stock pursuant to our equity compensation plans could result in additional dilution of the percentage ownership of our stockholders and could cause the price of our common stock to decline.

We will need additional capital 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, or if we issue common stock pursuant to our equity compensation plans, investors may be materially diluted by subsequent sales or issuances. These sales or issuances may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

USE OF PROCEEDS

We may issue and sell shares of our common stock having an aggregate offering price of up to $80.0 million from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions to SVB Leerink and proceeds to us, if any, are not determinable at this time. There can be no assurance that we will sell any shares under the Sales Agreement as a source of financing.

We intend to use the net proceeds from this offering to continue to fund the ongoing clinical development of our late stage product candidates and for other general corporate purposes, including funding existing and potential new clinical programs and product candidates.

Our expected use of the net proceeds to us from this offering represents our current intentions based upon our present plans and business condition. The amounts and timing of our actual expenditures will depend on numerous factors, including the progress of our research and development efforts, the status of and results from our current or future clinical trials, the timing of regulatory submissions and any unforeseen cash needs. Accordingly, our management will have broad discretion in the application of any net proceeds from this offering.

Until we use the net proceeds of this offering for the purposes described above, we intend to invest any funds we receive in short-term, investment-grade, interest-bearing instruments and U.S. government securities. We cannot predict whether these investments will yield a favorable return.

DILUTION

If you invest in our common stock in this offering, your interest will be diluted immediately to the extent of the difference between the price per share you pay in this offering and the as adjusted net tangible book value per share of our common stock after giving effect to this offering. Net tangible book value per share represents our total assets, less total liabilities, divided by the number of shares of our common stock outstanding.

At September 30, 2019, our net tangible book value was $6,822,596 or $0.20 per share of common stock, based on 34,496,846 shares of common stock then outstanding. After giving effect to the assumed sale by us of an aggregate of 1,754,001 shares of our common stock at an assumed offering price of $45.61 per share, the last reported sale price of our common stock on the Nasdaq Global Market on December 3, 2019, for aggregate gross proceeds of approximately $80.0 million, and after deducting commissions and estimated offering expenses payable by us, our net tangible book value at September 30, 2019 would have been $84,272,582 or $2.32 per share of common stock. This represents an immediate increase in net tangible book value to existing stockholders of $2.12 per share and an immediate dilution of $43.29 per share to new investors purchasing common stock at the assumed offering price of $45.61 per share in this offering.

The following table illustrates this per share dilution to the new investors purchasing shares of common stock in this offering:

Assumed offering price per share		$ 45.61
Net tangible book value per share at September 30, 2019	$ 0.20	
Increase in net tangible book value per share attributable to new investors purchasing shares in this offering	2.12	
As adjusted net tangible book value per share at September 30, 2019, after giving effect to this offering		2.32
Dilution per share to new investors in this offering		$ 43.29

The foregoing table and calculations are based on 34,496,846 shares of our common stock outstanding as of September 30, 2019, and excludes:

- 3,184,842 shares of common stock issuable upon exercise of stock options outstanding as of September 30, 2019, at a weighted average exercise price of $9.01 per share;
- 110,603 shares of common stock issuable upon the exercise of outstanding warrants as of September 30, 2019, consisting of 11,780 warrants with an exercise price of $5.94 per share, 32,614 warrants with an exercise price of $7.41 per share, 7,875 warrants with an exercise price of $3.06, 58,334 warrants with an exercise price of $8.10 per share, and 11,500 warrants with an exercise price of $25.71, which are not yet outstanding, but which will become outstanding if and when the additional $4.0 million tranche available to us under our term loan with Silicon Valley Bank and WestRiver Innovation Lending Fund VIII, L.P. is funded; and
- 3,668,590 shares of common stock available for future grant under our 2015 Omnibus Incentive Compensation Plan as of September 30, 2019;

An increase of $1.00 per share in the price at which the shares are sold from the assumed offering price of $45.61 per share shown in the table above, assuming all of our common stock in the aggregate amount of approximately $80.0 million during the term of the Sales Agreement with SVB Leerink is sold at that price, would increase our as adjusted net tangible book value per share to $2.33 per share and would increase the dilution in net tangible book value per share to new investors in this offering to $44.28 per share, 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 $45.61 per share shown in the table above, assuming all of our common stock in the aggregate amount of approximately $80.0 million during the term of the Sales Agreement with SVB Leerink is sold at that price, would decrease our as adjusted net tangible book value per share to $2.32 per share and would decrease the dilution in net tangible book value per share to new investors in this offering to $42.29 per share, after deducting commissions and estimated offering expenses payable by us.

The information discussed above is illustrative only and the shares subject to our Sales Agreement with SVB Leerink are being sold from time to time at various prices. Furthermore, to the extent outstanding options or warrants are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, you will experience further dilution.

PLAN OF DISTRIBUTION

We have entered into a Sales Agreement with SVB Leerink LLC, or SVB Leerink, under which we may issue and sell up to $80.0 million of shares of our common stock from time to time through SVB Leerink as our sales agent. In addition, at our option following the upcoming expiration of our shelf registration statement on Form S-3 (File No. 333-214859) on December 16, 2019, or the Pre-Existing Registration Statement, we may register additional shares of our common stock for sale and issuance through SVB Leerink under the at the market offering program to which this prospectus relates, in an amount equal to the aggregate value of our common stock that remains unsold under our prior at the market offering program with SVB Leerink at the time the Pre-Existing Registration Statement expires. In the event we elect to register any such additional shares of our common stock, we intend to file an updated prospectus supplement updating the aggregate number of shares of our common stock available for sale under this at-the-market offering program. Sales of our common stock, if any, will be made by any method that is deemed to be an "at the market offering" as defined in Rule 415 under the Securities Act, including sales made directly on or through the Nasdaq Global Market, on or through any other existing trading market for the common stock or to or through a market maker.

SVB Leerink will offer our common stock subject to the terms and conditions of the Sales Agreement on a daily basis or as otherwise agreed upon by us and SVB Leerink. We will designate the maximum number or amount of common stock to be sold through SVB Leerink on a daily basis or otherwise determine such maximum number or amount together with SVB Leerink. Subject to the terms and conditions of the Sales Agreement, SVB Leerink will use commercially reasonable efforts consistent with its normal trading and sales practices to sell on our behalf all of the common stock requested to be sold by us. We may instruct SVB Leerink not to sell common stock if the sales cannot be effected at or above a minimum price designated by us in any such instruction. SVB Leerink or we may suspend the offering of our common stock being made through SVB Leerink under the Sales Agreement upon proper notice to the other party. SVB Leerink and we each have the right, by giving written notice as specified in the Sales Agreement, to terminate the Sales Agreement in each party's sole discretion at any time. The offering of our common stock pursuant to the Sales Agreement will otherwise terminate upon the termination of the Sales Agreement as provided therein.

The compensation payable to SVB Leerink as sales agent will be an amount equal to 3.0% of the gross proceeds of any shares of common stock sold through it pursuant to the Sales Agreement. We have also agreed to reimburse SVB Leerink for actual outside legal expenses incurred by SVB Leerink in connection with this offering, including SVB Leerink's counsel fees in an amount up to $50,000, plus an additional amount of up to $15,000 in connection with determining our compliance with the rules and regulations of the Financial Industry Regulatory Authority, Inc., or FINRA. In accordance with FINRA Rule 5110 these reimbursed fees and expenses are deemed sales compensation to SVB Leerink in connection with this offering. We estimate that the total expenses of the offering payable by us, excluding commissions payable to SVB Leerink under the Sales Agreement, will be approximately $150,000.

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 of our common stock, will equal our net proceeds for the sale of such common stock.

SVB Leerink will provide written confirmation to us no later than the next succeeding trading day on the Nasdaq Global Market after each day on which common stock is sold through it as sales agent under the Sales Agreement. Each confirmation will include the number or amount of shares sold through it as sales agent on that day, the volume weighted average price of the shares sold, the percentage of the daily trading volume and the net proceeds to us from such sales.

We will report at least quarterly the number of shares of common stock sold through SVB Leerink under the Sales Agreement, the net proceeds to us and the compensation paid by us to SVB Leerink in connection with the sales of common stock during the relevant period.

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

In connection with the sale of the common stock on our behalf pursuant to the Sales Agreement, SVB Leerink will be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation paid to SVB Leerink will be deemed to be underwriting commissions or discounts. We have agreed in the Sales Agreement to provide indemnification and contribution to SVB Leerink with respect to certain liabilities, including liabilities under the Securities Act or the Exchange Act. As sales agent, SVB Leerink will not engage in any transactions that stabilize our common stock.

Our common stock is listed on the Nasdaq Global Market and trade under the symbol "AXSM." The transfer agent of our common stock is American Stock Transfer & Trust Company, LLC.

SVB Leerink and/or its affiliates have provided, and may in the future provide, various investment banking and other financial services for us for which services they have received, and may in the future receive, customary fees.

LEGAL MATTERS

The validity of the common stock being offered by this prospectus will be passed upon for us by DLA Piper LLP (US), Short Hills, New Jersey. Covington & Burling LLP, New York, New York, is counsel to SVB Leerink in connection with this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2018, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement of which this prospectus forms a part. Our financial statements are, and audited financial statements to be included in subsequently filed documents will be, incorporated by reference in reliance on Ernst & Young LLP's reports pertaining to such financial statements (to the extent covered by consents filed with the Securities and Exchange Commission), given on the authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is a part of the automatic “shelf” registration statement on Form S-3ASR that we filed with the SEC as a “well-known seasoned issuer” as defined in Rule 405 under the Securities Act. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement or the documents incorporated by reference herein and therein. For further information with respect to us and the securities that we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement and the documents incorporated by reference herein and therein. You should rely only on the information contained in this prospectus or incorporated by reference herein. We have not authorized anyone else to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus is accurate as of any date other than the date on the front page of this prospectus, regardless of the time of delivery of this prospectus or any sale of the securities offered hereby.

We file annual, quarterly and other reports, proxy and information statements and other information with the Securities and Exchange Commission. The SEC maintains a website that contains reports, proxy statements and other information regarding us. The address of the SEC website is *www.sec.gov*. We maintain a website at *www.axsome.com*. The information contained on, or that can be accessed through, our website is not a part of this prospectus. Investors should not rely on any such information in deciding whether to purchase our common stock. We have included our website address in this prospectus solely as an inactive textual reference.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus and information that we file later with the SEC will automatically update and supersede information contained in this prospectus.

The following documents are incorporated by reference into this document (other than the portions of these documents deemed to be "furnished" or not deemed to be "filed," including the portions of these documents that are furnished under Item 2.02 or Item 7.01 of a Current Report on Form 8-K, including any exhibits included with such Items):

- our annual report on Form 10-K for the fiscal year ended December 31, 2018 filed with the SEC on March 15, 2019;
- the information contained in our definitive proxy statement on Schedule 14A for our 2019 Annual Meeting of Stockholders, filed with the SEC on April 26, 2019, to the extent incorporated by reference in Part III of the Form 10 K for the fiscal year ended December 31, 2018;
- our quarterly report on Form 10-Q for the three months ended March 31, 2019 filed with the SEC on May 9, 2019;
- our quarterly report on Form 10-Q for the three months ended June 30, 2019 filed with the SEC on August 8, 2019;
- our quarterly report on Form 10-Q for the three months ended September 30, 2019 filed with the SEC on November 7, 2019;
- our current reports on Form 8-K filed with the SEC on January 7, 2019 (two filings); January 8, 2019; January 30, 2019; February 6, 2019; March 4, 2019; March 6, 2019; March 14, 2019; March 27, 2019; April 15, 2019; May 6, 2019; May 9, 2019 (two filings); June 7, 2019; June 24, 2019; July 11, 2019; July 29, 2019; August 8, 2019; August 20, 2019; September 5, 2019; October 2, 2019; October 16, 2019; October 21, 2019; October 28, 2019 (two filings); November 7, 2019 (two filings) and December 3, 2019; and
- the description of our common stock contained in our registration statement on Form 8-A12B, filed with the SEC on November 16, 2015 (File No. 001-37635), and all amendments or reports filed for the purpose of updating such description.

We also incorporate by reference into this prospectus all documents (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) that are filed by us with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and until the completion or termination of the offering contemplated hereby. These documents include periodic reports, such as Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K.

Any statement contained herein or in a document incorporated or deemed to be incorporated by reference into this document will be deemed to be modified or superseded for purposes of the document to the extent that a statement contained in this document or any other subsequently filed document that is deemed to be incorporated by reference into this document modifies or supersedes the statement.

We make available, free of charge, through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. You may also obtain, free of charge, a copy of any of these documents (other than exhibits to these documents, unless the exhibits are specifically incorporated by reference into these documents or referred to in this prospectus) by writing or calling us at the following address and telephone number:

Axsome Therapeutics, Inc.
200 Broadway
3rd Floor
New York, New York 10038
(212) 332-3241

Up to $80,000,000

Axsome Therapeutics, Inc.

Common Stock

PROSPECTUS

SVB Leerink

December 5, 2019

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the estimated expenses to be paid by us, other than any underwriting discounts and commissions, in connection with the offering of the securities described in this registration statement. All the amounts shown are estimates, except for the SEC registration fee and FINRA filing fee.

SEC registration fee	$ 10,384	(1)
FINRA filing fee		(2)
Legal fees and expenses		(2)
Accounting fees and expenses		(2)
Trustees' and transfer agent and registrar fees		(2)
Printing and miscellaneous expenses		(2)
Total	$ 10,384	(2)

(1) Represents the registration fee applicable to an amount included in a prospectus for $80.0 million in shares of common stock. Additional registration fees were deferred in accordance with rules 456(b) and 457(r) of the Securities Act.

(2) These fees will be dependent on the number and amount of offerings under this registration statement and, therefore, cannot be estimated at this time. In accordance with Rule 430B, additional information regarding estimated fees and expenses will be provided at the time information as to an offering is included in a prospectus supplement.

Item 15. Indemnification of Directors and Officers

As permitted by the DGCL, we have adopted provisions in our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws that limit or eliminate the personal liability of our directors to the maximum extent permitted under applicable law. Consequently, a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock repurchases, 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 Bylaws 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; and
- advance 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, subject to limited exceptions.

Our amended and restated certificate of incorporation provides that we will indemnify each of our executive officers and directors to the fullest extent permitted by the DGCL against liabilities that may arise by reason of their service to us or at our direction, and to advance expenses to each indemnitee in connection with any proceeding in which indemnification is available.

We also maintain general liability insurance to provide insurance coverage to our directors and officers for losses 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, or the Securities Act. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, or persons controlling the registrant pursuant to the foregoing provisions, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

These provisions may discourage stockholders from bringing a lawsuit against our directors in the future for any breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors, officers and certain employees pursuant to these indemnification provisions. We believe that these provisions, the indemnification agreements and the insurance are necessary to attract and retain talented and experienced directors and officers.

At present, there is no pending litigation or proceeding involving any of our directors, officers or employees in which indemnification will be required or permitted. We are not aware of any threatened litigation or proceeding that might result in a claim for such indemnification.

Item 16. Exhibits

The following documents are filed as exhibits to this registration statement, including those exhibits incorporated herein by reference to one of our prior filing under the Securities Act or the Exchange Act as indicated in parentheses:

Exhibit Number	Document
1.1*	Form of underwriting agreement.
1.2	Sales Agreement dated December 5, 2019 by and between Axsome Therapeutics, Inc. and SVB Leerink LLC.
4.1	Amended and Restated Certificate of Incorporation of the Company (Incorporated by reference, Exhibit 3.1 to the Company's Form 8-K (No. 001-37635) filed November 24, 2015)
4.2	Amended and Restated Bylaws of the Company (Incorporated by reference, Exhibit 3.2 to the Company's Form 8-K (No. 001-37635) filed November 24, 2015).
4.3	Specimen Certificate evidencing shares of Company's common stock (Incorporated by reference, Exhibit 4.1 to Amendment No. 1 to the Company's Registration Statement on Form S-1 (No. 333-207393) filed October 30, 2015.).
4.4*	Form of certificate of designation with respect to any preferred stock issued hereunder and the related form of preferred stock certificate.
4.5*	Form of warrant agreement.
4.6*	Form of warrant certificate.
4.7	Form of indenture to be entered into between registrant and a trustee acceptable to the registrant.
4.8*	Form of debt security.
4.9*	Form of rights certificate.
4.10*	Form of unit agreement.
4.11*	Form of unit certificate.
5.1	Opinion of DLA Piper LLP (US).
5.2	Opinion of DLA Piper LLP (US) related to the sales agreement prospectus.
23.1	Consent of Ernst & Young LLP.
23.2	Consent of DLA Piper LLP (US) (included in its Opinion filed as Exhibit 5.1 hereto).
23.3	Consent of DLA Piper LLP (US) (included in its Opinion filed as Exhibit 5.2 hereto).
24.1	Powers of Attorney (included on signature page).
25.1**	Statement of Eligibility of Trustee on Form T-1 under Trust Indenture Act of 1939.

* To be filed by amendment or as an exhibit to a document filed under the Securities Exchange Act of 1934, as amended, and incorporated by reference herein.

** To be filed separately pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939, as amended, and the appropriate rules and regulations thereunder.

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;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 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 this registration statement or any material change to such information in this registration statement;

provided, *however*, that paragraphs (1)(i), (1)(ii) and (1)(iii) above 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 Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act 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 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 date of the first 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 the 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 this registration statement or made in a document incorporated or deemed incorporated by reference into this registration statement or prospectus that is a part of this 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 this registration statement or prospectus that was a part of this 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, 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.

(6) That, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) 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 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 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 against the registrant by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

(8) If and when applicable, 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 in accordance with the rules and regulations prescribed by the Commission under Section 305(b)(2) of the Act.

(9) The undersigned registrant hereby undertakes that:

(i) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(ii) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3ASR and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on December 5, 2019.

AXSOME THERAPEUTICS, INC.

By: /s/ Herriot Tabuteau, M.D.
Herriot Tabuteau, M.D.
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Herriot Tabuteau, M.D. and Nick Pizzie, CPA, M.B.A., and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by the registration statement that is to be effective upon filing pursuant to Rule 462 promulgated under the Securities Act of 1933, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute or substitutes, 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 indicated on December 5, 2019.

Signature	Title
/s/ Herriot Tabuteau, M.D. Herriot Tabuteau, M.D.	Chief Executive Officer and Chairman of the Board (Principal Executive Officer)
/s/ Nick Pizzie Nick Pizzie	Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ Mark Coleman, M.D. Mark Coleman, M.D.	Director
/s/ Roger Jeffs, Ph.D. Roger Jeffs, Ph.D.	Director
/s/ Myrtle Potter Myrtle Potter	Director
/s/ Mark Saad Mark Saad	Director

Exhibit 4.7

AXSOME THERAPEUTICS, INC.

INDENTURE
Dated as of [□]
[□]
Trustee

TABLE OF CONTENTS

Page

AXSOME THERAPEUTICS, INC.

Reconciliation and tie between Trust Indenture Act of 1939, as amended,
and this Indenture

Trust Indenture Act Section	Indenture Section
§310 (a)(1)	6.09
(a)(2)	6.09
(a)(3)	Not Applicable
(a)(4)	Not Applicable
(a)(5)	6.09
(b)	6.04, 6.10
§311 (a)	6.13
(b)	6.13
§312 (a)	14.01, 14.02(a)
(b)	14.02(b)
(c)	14.02(c)
§313 (a)	14.03(a)
(b)	14.03(a)
(c)	14.03(a), 14.03(b)
(d)	14.03(b)
§314 (a)	4.05, 14.04
(b)	Not Applicable
(c)(1)	15.06
(c)(2)	15.06
(c)(3)	Not Applicable
(d)	Not Applicable
(e)	15.06
§315 (a)	6.01
(b)	6.06, 14.03(a)
(c)	6.01
(d)	6.01
(e)	5.11
§316 (a)(1)(A)	5.05
(a)(1)(B)	5.02, 5.04
(a)(2)	Not Applicable
(b)	5.07
(c)	7.02, 8.03
§317 (a)(1)	5.08
(a)(2)	5.09
(b)	4.03
318 (a)	15.08

This cross-reference table shall not, for any purpose, be deemed to be part of this Indenture.

INDENTURE dated as of [□] between Axsome Therapeutics, Inc., a Delaware corporation (the "Company"), the Guarantors (as defined herein) and [□], as trustee (the "Trustee").

W I T N E S S E T H:

WHEREAS, the Company and the Guarantors have duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of its unsecured debentures, notes or other evidences of indebtedness (herein called the "Securities"), to be issued in one or more series as in this Indenture provided; and

WHEREAS, all things necessary to make the Indenture a valid indenture and agreement according to its terms, have been done.

NOW, THEREFORE:

In consideration of the premises and the purchases of the Securities by the Holders thereof, the Company, the Guarantors and the Trustee mutually covenant and agree for the equal and proportionate benefit of the respective Holders from time to time of the Securities as follows:

Article 1
DEFINITIONS

SECTION 1.01. Certain Terms Defined. The following terms (except as otherwise expressly provided or unless the context otherwise clearly requires) for all purposes of this Indenture and of any indenture supplemental hereto shall have the respective meanings specified in this Section. All other terms used in this Indenture which are defined in the Trust Indenture Act or the definitions of which in the Securities Act are referred to in the Trust Indenture Act (except as herein otherwise expressly provided or unless the context otherwise clearly requires), shall have the meanings assigned to such terms in the Trust Indenture Act and in the Securities Act as in force at the date of this Indenture. All accounting terms used herein and not expressly defined shall have the meanings given to them in accordance with generally accepted accounting principles in the United States (whether or not such is indicated herein). The words "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. The terms defined in this Article include the plural as well as the singular.

"Agent Members" has the meaning provided in Section 3.08(a).

"Board of Directors" means, with respect to any Person, the board of directors or board of managers of such Person, or any authorized committee of the board of directors or board of managers of such Person or any officer of such Person duly authorized by the board of directors or board of managers of such Person to take a specific action.

"Board Resolution" means, with respect to the Company or any Guarantor, a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company or such Guarantor, respectively, to have been duly adopted by the Board of Directors of the Company or such Guarantor, respectively, and to be in full force and effect on the date of such certification, and delivered to the Trustee.

"Business Day" means any day except a Saturday, Sunday or other day on which banking institutions or trust companies located in the same jurisdiction as the Payment Office specified pursuant to Section 3.01 are authorized or obligated by law or executive order to close, except as otherwise specified pursuant to Section 3.01.

"Commission" means the United States 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 the Person named as the "Company" in the first paragraph of this Indenture until a successor shall have become such pursuant to the applicable provisions of this Indenture, and thereafter "Company" shall mean such successor.

"Company Request" or "Company Order" means a written request or order signed in the name of the Company by its Chairman of the Board of Directors, its President, its Chief Executive Officer, its Chief Financial Officer, its Treasurer, its Controller, its Secretary or an Assistant Secretary, and delivered to the Trustee.

"Corporate Trust Office" means the corporate trust office of the Trustee at which the corporate trust business of the Trustee shall, at any particular time, be principally administered, which office is, at the date as of which this Indenture is dated, located at [□].

"Default" means any event that is or with the passage of time or the giving of notice or both would be an Event of Default.

"Depositary" means The Depository Trust Company, its nominees, and their respective successors.

"Dollar" or "$" means a dollar or other equivalent unit in such coin or currency of the United States as at the time shall be legal tender for the payment of public and private debt.

"Event of Default" means any event or condition specified as such in Section 5.01 which shall have continued for the period of time, if any, therein designated.

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

"GAAP" means generally accepted accounting principles in the United States set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as may be approved by a significant segment of the accounting profession of the United States, as in effect from time to time. At any time after the Issue Date with respect to a series of Securities, the Company may elect to apply IFRS in lieu of GAAP and, upon any such election, references in this Indenture to GAAP shall thereafter be construed to mean IFRS as in effect from time to time. The Company shall give notice of any such election to the Trustee.

"Global Security" means a Security, and any Guarantees endorsed thereon, evidencing all or part of a series of Securities and the corresponding Guarantees, if any, issued to the Depositary for that series in accordance with Section 3.05 and bearing the appropriate legend prescribed in Section 3.06.

"Government Securities" means direct obligations of, or obligations guaranteed by, the United States of America, and the payment for which the United States pledges its full faith and credit.

"Guarantee" means with respect to the Securities of any series, the Guarantee with respect to the Securities of such series by the applicable Guarantor or Guarantors pursuant to Section 2.02 hereof and a supplemental indenture.

"Guarantor" means, with respect to Securities of any series, any of the Company's direct and indirect Subsidiaries, but only if such entity has guaranteed the Company's obligations under this Indenture and with respect to such series of Securities pursuant to Section 2.01 hereof; provided that upon the release and discharge of any Person from its Guarantee in accordance with this Indenture or as specified pursuant to Section 3.01, such Person shall cease to be a Guarantor.

"Holder," "Holder of Securities" or other similar terms mean the registered holder of any Security.

"IFRS" means International Financial Reporting Standards promulgated by the International Accounting Standards Board (or any successor board or agency) and as adopted by the European Union, as in effect from time to time.

"Indenture" means this indenture as originally executed or as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the terms of particular series of Securities established as contemplated hereunder.

"Interest Payment Date" means, when used with respect to any Security, the Stated Maturity of an installment of interest on such Security.

"Issue Date" means, with respect to Securities of a series, the first date on which the Securities of such series are originally issued under this Indenture.

"Maturity," means, when used with respect to any Security, the date on which the principal of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, call for redemption or otherwise.

"Notice of Default" has the meaning provided in Section 6.06.

"Officers' Certificate" means a certificate signed on behalf of the Company by an officer of the Company (or on behalf of a Guarantor by an officer of such Guarantor, as the case may be) that meets the requirements of Section 15.06 hereof.

"Opinion of Counsel" means an opinion in writing signed by legal counsel who may be an employee of or counsel to the Company or a Guarantor or who may be other counsel satisfactory to the Trustee.

"outstanding" means, when used with reference to Securities, subject to the provisions of Article 7, as of any particular time, all Securities authenticated and delivered by the Trustee under this Indenture, except

(a) Securities theretofore canceled by the Trustee or delivered to the Trustee for cancellation;

(b) Securities, or portions thereof, for the payment or redemption of which moneys in the necessary amount shall have been deposited in trust with the Trustee or with any Paying Agent (other than the Company or a Guarantor) or shall have been set aside, segregated and held in trust by the Company or a Guarantor (if the Company or a Guarantor shall act as Paying Agent); provided that if such Securities are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given as herein provided, or provision satisfactory to a Responsible Officer of the Trustee shall have been made for giving such notice;

(c) Securities in substitution for which other Securities shall have been authenticated and delivered, or which shall have been paid, pursuant to the terms of Section 3.09 (unless proof satisfactory to the Trustee and the Company is presented that any of such Securities is held by a person in whose hands such Security is a legal, valid and binding obligation of the Company); and

(d) Securities that have been defeased pursuant to Section 12.01.

"Paying Agent" means any Person authorized by the Company to pay the principal of (and premium, if any) and interest, if any, on any Securities on behalf of the Company. The Company or a Guarantor may act as Paying Agent with respect to any Securities issued hereunder.

"Payment Office" means, when used with respect to the Securities of or within any series, the place or places where the principal of (and premium, if any) and interest on such Securities are payable as specified pursuant to Section 3.01.

"Person" means any individual, corporation, partnership, joint stock company, business trust, trust, unincorporated association, joint venture or other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

"Physical Securities" means Securities issued pursuant to Section 3.02 in exchange for interest in the Global Security or pursuant to Section 3.08(b) in registered form substantially in the form hereinabove recited.

"Principal Amount" means, when used with respect to any Security, the amount of principal of such Security that could then be declared due and payable pursuant to Section 5.02.

"Registrar" has the meaning provided in Section 3.07.

"Regular Record Date" for the interest payable on any Interest Payment Date on the Securities of any series means the date specified for that purpose as contemplated by Section 3.01.

"Responsible Officer" means, when used with respect to the Trustee, any officer within the Corporate Trust Office of the Trustee including any vice president, any trust officer, any assistant vice president, any assistant secretary, any assistant treasurer, or any other officer of the Trustee customarily performing functions similar to those performed by the persons who at the time shall be such officers, respectively, or to whom any corporate trust matter is referred because of his or her knowledge of and familiarity with the particular subject and who shall have direct responsibility for the administration of this Indenture.

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

"Security" or "Securities" means any Security or Securities, as the case may be, authenticated and delivered under this Indenture.

"Security Register" has the meaning provided in Section 3.07.

"Stated Maturity" means, when used with respect to any Security or any installment of principal thereof or interest thereon, the date specified in such Security or a coupon representing such installment of interest as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

"Subsidiary" means, as applied, with respect to any Person, any corporation, partnership or other legal entity of which, in the case of a corporation, more than 50% of the issued and outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether at the time capital stock of any other class or classes of such corporation has or might have voting power upon the occurrence of any contingency), or, in the case of any partnership or other legal entity, more than 50% of the ordinary equity capital interests, is at the time directly or indirectly owned or controlled by such Person, by such Person and one or more of its other Subsidiaries or by one or more of such Person's other Subsidiaries.

"Trust Indenture Act" means the Trust Indenture Act of 1939, as amended, as in force at the date as of which this Indenture was originally executed, and "TIA" means, when used in respect of an indenture supplemental hereto, such Act as in force at the time such indenture supplemental hereto becomes effective.

"Trustee" means the Person named as the "Trustee" in the first paragraph of this Indenture until a successor Trustee shall have become such pursuant to the applicable provisions of this Indenture, and thereafter "Trustee" shall mean or include each Person who is then a Trustee hereunder; provided that if at any time there is more than one such Person, "Trustee" as used with respect to the Securities of any series shall mean only the Trustee with respect to Securities of that series.

SECTION 1.02. Other Definitions.

Term	Defined in Section
"Authorized Agent"	15.12
"Covenant Defeasance"	12.03
"Legal Defeasance"	12.02
"Specified Courts"	15.12

SECTION 1.03. Rules of Construction.

Unless the context otherwise requires:

(a) a term has the meaning assigned to it;

(b) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;

(c) “or” is not exclusive;

(d) words in the singular include the plural, and in the plural include the singular;

(e) provisions apply to successive events and transactions; and

(f) all references in this instrument to Articles and Sections are references to the corresponding Articles and Sections in and of this instrument unless the context requires otherwise.

Article 2
SECURITY FORMS

SECTION 2.01. Forms Generally. The Securities of each series, and all Guarantees endorsed thereon, if any, shall be in substantially the forms as shall be established by or pursuant to a Board Resolution of the Company (and a Board Resolution of each Guarantor with respect to the Guarantees, if any) or in one or more indentures supplemental hereto, in each case with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture, and may have such letters, numbers or other marks of identification and such legends or endorsements placed thereon as may be required to comply with the rules of any securities exchange or as may, consistently herewith, be determined by the officers executing such Securities and Guarantees, if any, as evidenced by their execution of the Securities and Guarantees. If the form of Securities of any series, and any Guarantees endorsed thereon, is established by action taken pursuant to a Board Resolution, a copy of an appropriate record of such action shall be certified by the Secretary or an Assistant Secretary of the Company, and by the Secretary or Assistant Secretary of the Guarantors, if any, and delivered to the Trustee at or prior to the delivery of the Company Order contemplated by Section 3.02 for the authentication and delivery of such Securities.

The Trustee’s certificate of authentication on all Securities shall be in substantially the form set forth in this Article.

The definitive Securities of any series shall be printed, lithographed or engraved on steel-engraved borders or may be produced in any other manner, all as determined by the officers executing such Securities, as evidenced by their execution of such Securities.

SECTION 2.02. Guarantees by Guarantor; Form of Guarantee; Release of Guarantee.

(a) Except as otherwise specified in or pursuant to the Officers’ Certificate or supplemental indenture contemplated by Section 3.01(b), the provisions of this Section 2.02 will be applicable to any series of Securities that is to be guaranteed by one or more Guarantors.

(b)Each Guarantor by its execution of this Indenture hereby agrees with each Holder of a Security of each series that is guaranteed by such Guarantor and authenticated and delivered by the Trustee and with the Trustee on behalf of each such Holder, to be unconditionally bound by the terms and provisions of the Guarantee set forth below and authorizes the Trustee to confirm such Guarantee to the Holder of each such Security by its execution and delivery of each such Security, with such Guarantee endorsed thereon, authenticated and delivered by the Trustee.

Guarantees to be endorsed on the Securities shall, subject to this Section 2.02, be in substantially the form set forth below:

GUARANTEE
OF
[GUARANTOR]

For value received, [□] (the “Guarantor”) hereby unconditionally and irrevocably guarantees, jointly and severally, to the Holder of the Security upon which this Guarantee is endorsed and to the Trustee on behalf of each such Holder the due and punctual payment of the principal of, premium, if any, interest and additional amounts, if any, on such Security and the due and punctual payment of any sinking fund or analogous payments referred to therein, if any, when and as the same shall become due and payable, whether on the Stated Maturity, by declaration of acceleration, call for redemption or otherwise, according to the terms thereof and of the Indenture dated as of [□]

among Axsome Therapeutics, Inc. (hereinafter called the "Company," which term includes any successor Person thereto under the Indenture), the Guarantors (as defined therein) and [□], as trustee (the "Indenture" and as supplemented by any applicable supplemental indenture, the "Indenture"). In case of the failure of the Company punctually to make any such payment of principal, premium, if any, or interest, and additional amounts, if any, or any sinking fund or analogous payment, the Guarantor, for so long as this Guarantee shall be in effect, hereby agrees to cause any such payment to be made to or to the order of the Trustee punctually when and as the same shall become due and payable, whether on the Stated Maturity or by declaration of acceleration, call for redemption or otherwise, and as if such payment were made by the Company.

The Guarantor hereby agrees, to the extent permitted by law, that its obligations hereunder shall be as if it were the principal debtor and not merely surety, and shall be absolute and unconditional, irrespective of, and shall be unaffected by, any invalidity, irregularity or unenforceability of such Security or the Indenture, any failure to enforce the provisions of such Security or the Indenture, or any waiver, modification or indulgence granted to the Company with respect thereto, by the Holder of such Security or the Trustee or any other circumstance which may otherwise constitute a legal or equitable discharge of a surety or guarantor. The Guarantor hereby waives, to the extent permitted by law, diligence, presentment, demand of payment, filing of claims with a court in the event of merger or bankruptcy of the Company, any right to require a proceeding first against the Company, protest or notice with respect to such Security or the indebtedness evidenced thereby or with respect to any sinking fund or analogous payment required under such Security and all demands whatsoever, and covenants that this Guarantee will not be discharged except by payment in full of the principal of, premium, if any, and interest on such Security or as otherwise described in Section 2.02 of the Indenture.

This Guarantee shall be automatically and unconditionally released on the terms set forth in Section 2.02(c) of the Indenture and such terms as have been specified pursuant to Section 3.01.

The Guarantor shall be subrogated to all rights of the Holder of such Security and the Trustee against the Company in respect of any amounts paid to such Holder by the Guarantor pursuant to the provisions of this Guarantee; provided that the Guarantor shall not be entitled to enforce, or to receive any payments arising out of or based upon such right of subrogation until the principal of, premium, if any, and interest on all Securities of the same series issued under the Indenture shall have been paid in full.

The Guarantor hereby agrees that its obligations hereunder shall be direct, unconditioned and unsubordinated and will rank equally and ratably without preference and at least equally with other senior unsecured and unsubordinated obligations of the Guarantor, except to the extent prescribed by law. The Holder of a guaranteed Security will be entitled to payment under the Guarantee without taking any action whatsoever against the Company.

No reference herein to the Indenture and no provision of this Guarantee or of the Indenture shall alter or impair the guarantee of the Guarantor, which is absolute and unconditional, of the due and punctual payment of the principal of, premium, if any, and interest on, any additional amounts, and any sinking fund or analogous payments with respect to, the Security upon which this Guarantee is endorsed.

This Guarantee shall not be valid or obligatory for any purpose until the certificate of authentication of such Security shall have been manually executed by or on behalf of the Trustee under the Indenture.

All terms used in this Guarantee that are defined in the Indenture shall have the meanings assigned to them in the Indenture.

This Guarantee shall be governed by and construed in accordance with the laws of the State of New York, but without giving effect to applicable principles of conflicts of law to the extent that the application of the law of another jurisdiction would be required thereby.

Executed and dated the date on the face hereof.

[GUARANTOR]

By:
Name:
Title:

(c) Release of Guarantee.

(i) The Guarantee of a Guarantor relating to a series of Securities shall be released automatically and unconditionally, and such Guarantor shall be relieved of all of its obligations under its Guarantee of such Securities, (A) upon defeasance or discharge of such series of Securities as provided in Article 12 or Article 13 of this Indenture, (B) if for any reason, such Guarantor ceases to be a Subsidiary of the Company, or (C) in connection with any sale, disposition or transfer of all or substantially all of the assets of that Guarantor (including by way of merger or consolidation) to a Person that is not (either before or after giving effect to such transaction) the Company or a Subsidiary of the Company.

(ii) The Guarantee of a Guarantor relating to a series of Securities shall be released automatically and unconditionally, and such Guarantor shall be relieved of all of its obligations under its Guarantee of such Securities, in any additional circumstances provided in the terms of the Securities of such series established pursuant to Section 3.01 of this Indenture and any relevant supplemental indenture.

(iii) At such time as a Guarantor's Guarantee is released with respect to any series of Securities, such Guarantor will no longer be considered a "Guarantor" of such series of Securities.

(iv) The Trustee shall promptly execute any documents reasonably requested by the Company or applicable Guarantor relating to a series of Securities in order to evidence the release of such Guarantor from its obligations under its Guarantee of the Securities of such series; provided that the Trustee shall not be obligated to execute or deliver any document evidencing the release of a Guarantee pursuant to this Section 2.02(c) unless the Company has delivered an Officers' Certificate or an Opinion of Counsel to the effect that such release is in accordance with the provisions of this Indenture.

SECTION 2.03. Form of Trustee's Certificate of Authentication. The Trustee's certificate of authentication shall be substantially in the following form:

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

[ ],
as Trustee

By:
Authorized Signatory

Article 3
ISSUE, EXECUTION, FORM AND REGISTRATION OF SECURITIES

SECTION 3.01. Amount Unlimited; Issuable in Series.

(a) The aggregate principal amount of Securities which may be authenticated and delivered under this Indenture is unlimited.

(b) The Securities may be issued from time to time in one or more series. Prior to the issuance of Securities of any series, there shall be established in or pursuant to (i) a Board Resolution of the Company and each Guarantor, if any, of the Securities of such series, (ii) action taken pursuant to a Board Resolution and (subject to

Sections 3.03 and 3.04) set forth, or determined in the manner provided, in an Officers' Certificate of the Company and each Guarantor, if any, of the Securities of such series, or (iii) one or more indentures supplemental hereto:

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

(2) whether or not such Securities are to be guaranteed pursuant to Section 2.02 and, if so, the Guarantor or Guarantors thereof;

(3) the purchase price, denomination and any limit upon the aggregate principal amount of the Securities of the 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 the series pursuant to Sections 3.07, 3.09, 3.11, 9.05 or 11.03);

(4) the date or dates on which the principal of and premium, if any, on the Securities of the series is payable or the method of determination thereof;

(5) the rate or rates at which the Securities of the series shall bear interest, if any, or the method of calculating such rate or rates of interest, the date or dates from which such interest shall accrue or the method by which such date or dates shall be determined, the Interest Payment Dates on which any such interest shall be payable and the Regular Record Date, if any, for the interest payable on any Interest Payment Date;

(6) the place or places where the principal of (and premium, if any) and interest, if any, on Securities of the series shall be payable;

(7) the place or places where the Securities may be exchanged or transferred;

(8) the period or periods within which, the price or prices at which, the currency or currencies (including currency unit or units) in which, and the other terms and conditions upon which Securities of the series may be redeemed, in whole or in part, at the option of the Company, if the Company is to have that option, and, if other than as provided in Section 11.02, the manner in which the particular Securities of such series (if less than all Securities of such series are to be redeemed) are to be selected for redemption;

(9) the obligation, if any, of the Company to redeem or purchase Securities of the series in whole or in part pursuant to any sinking fund or analogous provisions or upon the happening of a specified event or at the option of a Holder thereof and the period or periods within which, the price or prices at which, and the other terms and conditions upon which Securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

(10) if other than denominations of $2,000 and multiples of $1,000 in excess thereof, the denominations in which Securities of the series shall be issuable;

(11) if other than Dollars, the currency or currencies (including currency unit or units) in which payments of principal of (and premium, if any) and interest, if any, on the Securities of the series shall or may by payable, or in which the Securities of the series shall be denominated, and the particular provisions applicable thereto;

(12) if the payments of principal of (and premium, if any) and interest, if any, on the Securities of the series are to be made, at the election of the Company or a Holder, in a currency or currencies (including currency unit or units) other than that in which such Securities are denominated or designated to be payable, the currency or currencies (including currency unit or units) in which such payments are to be made, the terms and conditions of such payments and the manner in which the exchange rate with respect to such payments shall be determined, and the particular provisions applicable thereto;

(13) if the amount of payments of principal of (and premium, if any) and interest, if any, on the Securities of the series shall be determined with reference to any commodities, currencies or indices,

values, rates or prices or any other index, formula or method (which index, formula or method may be based, without limitation, on a currency or currencies (including currency unit or units) other than that in which the Securities of the series are denominated or designated to be payable), the manner in which such amounts shall be determined;

(14) if other than the 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 5.02 or the method by which such portion shall be determined;

(15) any modifications of or additions to the Events of Default set forth in Section 5.01 or the covenants of the Company set forth in Article 4 or Article 10 with respect to Securities of the series; and whether such additional or modified Events of Default or covenants are subject to covenant defeasance pursuant to Section 12.03;

(16) if either or both of Section 12.02 and Section 12.03 shall be inapplicable to the Securities of the series (provided that if no such inapplicability shall be specified and the Securities of such series are not convertible into or their value is not determined with reference to the Company's equity securities, then both Section 12.02 and Section 12.03 shall be applicable to the Securities of such series; provided further that if no such inapplicability shall be specified and the Securities of such series are convertible into or their value is determined with reference to the Company's equity securities, then neither Section 12.02 nor Section 12.03 shall be applicable to the Securities of such series) and any other terms upon which the Securities of such series will be defeasible;

(17) if other than the Trustee, the identity of the Registrar and any Paying Agent;

(18) if the Securities of the series shall be issued in whole or in part in global form, (i) the Depositary for such global Securities, (ii) the form of any legend in addition to or in lieu of that in Section 3.06 which shall be borne by such global Security, (iii) whether beneficial owners of interests in any Securities of the series in global form may exchange such interests for certificated Securities of such series and of like tenor of any authorized form and denomination, and (iv) if other than as provided in Section 3.08, the circumstances under which any such exchange may occur;

(19) if, and the terms and conditions upon which, the Securities of such series may or must be converted into securities of the Company or exchanged for securities of the Company or another enterprise; and

(20) any other terms of the series or any Guarantees endorsed thereon (which terms shall not adversely affect a prior series of Securities).

All Securities of any one series shall be substantially identical except as to denomination and except as may otherwise be provided (i) by a Board Resolution of the Company, (ii) by action taken pursuant to a Board Resolution of the Company and (subject to Sections 3.02-3.05) set forth, or determined in the manner provided, in an Officers' Certificate or (iii) in any such indenture supplemental hereto. All Securities of any one series need not be issued at the same time and, unless otherwise provided, a series may be reopened, without the consent of the Holders, for issuances of additional Securities of such series.

If any of the terms of the Securities of any series, and any Guarantees endorsed thereon, are established by action taken pursuant to a Board Resolution of the Company and the Guarantors, if any, a copy of an appropriate record of such action shall be certified by the Secretary or an Assistant Secretary of the Company and the Guarantors, if any, and delivered to the Trustee at or prior to the delivery of the Officers' Certificate setting forth, or providing the manner for determining, the terms of the Securities of such series, and an appropriate record of any action taken pursuant thereto in connection with the issuance of any Securities of such series shall be delivered to the Trustee prior to the authentication and delivery thereof.

SECTION 3.02. Authentication and Delivery of Securities. Upon the execution and delivery of this Indenture, or from time to time thereafter, Securities of any series and any Guarantees endorsed thereon may be executed by the Company and the Guarantors, if any, and delivered by the Company to the Trustee for

authentication, together with a Company Order, and upon delivery to the Trustee of all documents and certificates as required by this Indenture, the Trustee shall thereupon, in accordance with such Company Order, authenticate and make available for delivery said Securities.

SECTION 3.03. Execution of Securities. The Securities of each series shall be executed on behalf of the Company, and each of the Guarantees, if any, shall be executed on behalf of the applicable Guarantor, by the Chairman of the Board of Directors, the President, the Chief Executive Officer, the Chief Financial Officer, the Treasurer, the Controller, the Secretary or any Assistant Secretary of the Company or of such Guarantor, as the case may be. The signatures of any of such officers on the Securities or the Guarantees may be the manual or facsimile signatures of the present or any future such officers. In case any officer of the Company or of each Guarantor, if any, who shall have signed any of the Securities and Guarantees, if any, shall cease to be such officer before the Security so signed or to which the Guarantee relates shall be authenticated and delivered by the Trustee or disposed of by the Company, such Security nevertheless may be authenticated and delivered or disposed of as though the person who signed such Security or Guarantee had not ceased to be such officer of the Company or of such Guarantor, as the case may be; and any Security or Guarantee may be signed on behalf of the Company or of a Guarantor, if any, by such persons as shall be the proper officers of the Company or of such Guarantor, as the case may be, at the actual date of the execution of such Security or Guarantee even though any such person was not such officer at the date of the execution and delivery of this Indenture.

SECTION 3.04. Certificate of Authentication. Only such Securities or Guarantees endorsed thereon, if any, as shall bear thereon a certificate of authentication substantially in the form hereinabove recited, executed by the Trustee by manual signature of one of its authorized signatories, shall be entitled to the benefits of this Indenture or be valid or obligatory for any purpose. Such certificate by the Trustee upon any Security executed by the Company 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.

SECTION 3.05. Denomination, Currency and Date of Securities; Payments of Interest.

(a) The Securities shall be issuable in such denominations and currency as shall be specified as contemplated by Section 3.01. In the absence of any specification pursuant to Section 3.01 with respect to Securities of any series, the Securities of such series shall be denominated in Dollars, issuable only as Securities in denominations of $2,000 and multiples of $1,000 in excess thereof and payable only in Dollars. The Securities shall be numbered, lettered, or otherwise distinguished in such manner or in accordance with such plans as the officers of the Company executing the same may determine with the approval of the Trustee.

Any of the Securities and Guarantees, if any, may be issued with appropriate insertions, omissions, substitutions and variations, and may have imprinted or otherwise reproduced thereon such legend or legends, not inconsistent with the provisions of this Indenture, as may be required to comply with any law or with any rules or regulations pursuant thereto, including those required by Section 3.06, or with the rules of any securities market in which the Securities are admitted to trading, or to conform to general usage.

Each Security shall be dated the date of its authentication, shall bear interest from the applicable date and shall be payable on the dates specified on the face of the form of Security above. Except as otherwise specified as contemplated by Section 3.01 for Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year of twelve 30-day months.

(b) Global Securities. If Securities of or within a series are issuable in whole or in part in global form, then any such Security of such series shall be deposited with the Trustee as custodian for the Depositary and registered in the name of Cede & Co., as nominee for the Depositary. The Global Security shall be deposited on behalf of the purchasers of the Securities represented thereby with the Trustee, as custodian for the Depositary (or with such other custodian as the Depositary may direct), and registered in the name of the Depositary or a nominee of the Depositary, duly executed by the Company and each Guarantor, if any, and authenticated by the Trustee as hereinafter provided. The aggregate principal amount of the Global Securities may from time to time be increased or decreased by adjustments made on the records of the Trustee and the Depositary or its nominee as hereinafter provided.

(c) The person in whose name any Security is registered at the close of business on any Regular Record Date with respect to any Interest Payment Date shall be entitled to receive the interest, if any, payable on such Interest Payment Date notwithstanding any transfer or exchange of such Security subsequent to the Regular Record Date and prior to such Interest Payment Date, except if and to the extent the Company or a Guarantor, if any, shall default in the payment of the interest due on such Interest Payment Date, in which case such defaulted interest, plus (to the extent lawful) any interest payable on the defaulted interest, shall be paid to the persons in whose names outstanding Securities are registered at the close of business on a subsequent record date (which shall be not less than five Business Days prior to the date of such payment) established by notice given by mail by or on behalf of the Company or such Guarantor to the Holders of Securities not less than 15 calendar days preceding such subsequent record date.

SECTION 3.06. Global Security Legend. Any Security in global form authenticated and delivered hereunder shall bear a legend in substantially the following form, or in such other form as may be necessary or appropriate to reflect the arrangements with or to comply with the requirements of any Depositary:

> THIS SECURITY IS A GLOBAL SECURITY WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF THE DEPOSITARY OR A NOMINEE OF THE DEPOSITARY, WHICH MAY BE TREATED BY THE COMPANY, THE TRUSTEE AND ANY AGENT THEREOF AS OWNER AND HOLDER OF THIS SECURITY FOR ALL PURPOSES.
>
> UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, TO THE COMPANY OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & Co. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY (AND ANY PAYMENT HEREON IS MADE TO CEDE & Co. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL SINCE THE REGISTERED OWNER HEREOF, CEDE & Co., HAS AN INTEREST HEREIN.
>
> TRANSFERS OF THIS GLOBAL SECURITY SHALL BE LIMITED TO TRANSFERS IN WHOLE, BUT NOT IN PART, TO NOMINEES OF THE DEPOSITORY TRUST COMPANY OR TO A SUCCESSOR THEREOF OR SUCH SUCCESSOR'S NOMINEE.

SECTION 3.07. Registration, Transfer and Exchange. The Securities are issuable only in registered form. The Company will keep at each office or agency (the "Registrar") for each series of Securities a register or registers (the "Security Register(s)") in which, subject to such reasonable regulations as it may prescribe, it will register, and will register the transfer of Securities as provided in this Article. Such Security Register or Security Registers shall be in written form in the English language or in any other form capable of being converted into such form within a reasonable time. At all reasonable times such Security Register or Security Registers shall be open for inspection by the Trustee. The initial Registrar shall be the Trustee.

Upon due presentation for registration of transfer of any Security of any series at each such office or agency, the Company shall execute a new Security or Securities of the same series, in each case, of any authorized denominations and of a like aggregate Principal Amount in the name of the designated transferee or transferees, the applicable Guarantors, if any, shall execute the Guarantees endorsed thereon and, upon receipt of a Company Order, the Trustee shall authenticate and make available for delivery such Securities.

At the option of the Holder, Securities of any series (except a Security in global form) may be exchanged for other Securities of the same series, of any authorized denominations and of a like aggregate Principal Amount and Stated Maturity, upon surrender of the Securities to be exchanged at such office or agency. Whenever any Securities are so surrendered for exchange, the Company shall execute the Securities which the Holder making the exchange is entitled to receive, the applicable Guarantors, if any, shall execute the Guarantees endorsed thereon and, upon receipt of a Company Order, the Trustee shall authenticate and make available for delivery such Securities.

A Holder may transfer a Security only by written application to the Registrar stating the name of the proposed transferee and otherwise complying with the terms of this Indenture. No such transfer shall be effected until, and such transferee shall succeed to the rights of a Holder only upon, final acceptance and registration of the transfer by the Registrar in the Security Register. Prior to the registration of any transfer by a Holder as provided herein, the Company, the Guarantors, if any, and the Trustee or any of their respective agents shall treat the person in whose name the Security is registered as the owner thereof for all purposes whether or not the Security shall be overdue, and neither the Company, the Guarantors, if any, the Trustee, nor any such agent shall be affected by notice to the contrary. Furthermore, any Holder of a Global Security shall, by acceptance of such Global Security, agree that transfers of beneficial interests in such Global Security may be effected only through a book entry system maintained by the Depository (or its nominee) and that ownership of a beneficial interest in the Security shall be required to be reflected in a book entry. When Securities are presented to the Registrar or a co-Registrar with a request to register the transfer or to exchange them for an equal Principal Amount of Securities of other authorized denominations, the Registrar shall register the transfer or make the exchange as requested if the requirements for such transactions set forth herein are met. To permit registrations of transfers and exchanges, the Company shall execute the Securities, the applicable Guarantors, if any, shall execute the Guarantees endorsed thereon and the Trustee shall authenticate Securities at the Registrar's request.

The Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any exchange or registration of transfer of Securities (other than any such transfer taxes or other similar governmental charge payable upon exchanges pursuant to Section 3.11, 9.05 or 11.03). No service charge to any Holder shall be made for any such transaction.

The Company shall not be required to exchange or register a transfer of (a) any Securities of any series for a period of 15 calendar days next preceding the first mailing of notice of redemption of Securities of that series to be redeemed, or (b) any Securities of any series selected, called or being called for redemption except, in the case of any Security of any series where public notice has been given that such Security is to be redeemed in part, the portion thereof not so to be redeemed.

All Securities issued upon any transfer or exchange of Securities shall be valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered upon such transfer or exchange.

SECTION 3.08. Book-Entry Provisions for Global Securities.

(a) Each Global Security initially shall (i) be registered in the name of the Depositary for such Global Securities or the nominee of such Depositary, (ii) be delivered to the Trustee as custodian for such Depositary and (iii) bear legends as set forth in Section 3.06.

Members of, or participants in, the Depositary ("Agent Members") shall have no rights under this Indenture with respect to any Global Security held on their behalf by the Depositary, or the Trustee as its custodian, or under the Global Security, and the Depositary may be treated by the Company, each Guarantor, if any, the Trustee and any of their respective agents as the absolute owner of such Global Security for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Company, each such Guarantor, the Trustee or any of such agents from giving effect to any written certification, proxy or other authorization furnished by the Depositary or impair, as between the Depositary and its Agent Members, the operation of customary practices governing the exercise of the rights of a holder of any Security.

(b) Transfers of a Global Security shall be limited to transfers of such Global Security in whole, but not in part, to the Depositary for such series, its successors or their respective nominees. The Company may at any time and in its sole discretion determine that the Securities of a series issued in the form of one or more Global Securities shall no longer be represented by such Global Securities. In such event, the Company will execute Securities of such series of like tenor and terms in definitive form in an aggregate Principal Amount equal to the Principal Amount of the Global Security or Securities of such series, the applicable Guarantors, if any, shall execute the Guarantees endorsed thereon and the Trustee, upon receipt of a Company Order, will authenticate and deliver such definitive Securities in exchange for such Global Security or Securities. Interests of beneficial owners in a Global Security may be transferred in accordance with the rules and procedures of the Depositary.

In addition, Physical Securities shall be transferred to all beneficial owners identified by the Depositary in exchange for their beneficial interests in a Global Security, if (i) the Depositary (A) notifies the Company that it is unwilling or unable to continue as Depositary for such Global Security, and a successor depositary is not appointed by the Company within 90 calendar days of such notice, or (B) ceases to be qualified to serve as Depositary and a successor depositary is not appointed by the Company within 90 calendar days of such notice, (ii) the Company executes and delivers to the Trustee a Company Order that such Global Security shall be so transferable, registrable and exchangeable, and such transfers shall be registrable, or (iii) an Event of Default of which the Trustee has actual notice has occurred and is continuing and the Registrar has received a request from a beneficial owner to issue such Physical Securities, and if the Trustee is the Registrar, a Company Order or written confirmation from the Depositary identifying the beneficial owner.

(c) Any beneficial interest in one of the Global Securities that is transferred to a person who takes delivery in the form of an interest in the other Global Security will, upon transfer, cease to be an interest in such Global Security and become an interest in the other Global Security and, accordingly, will thereafter be subject to all transfer restrictions, if any, and other procedures applicable to beneficial interests in such other Global Security for as long as it remains such an interest.

(d) In connection with any transfer of a portion of the beneficial interests in a Global Security to beneficial owners pursuant to paragraph (b) of this Section 3.08, the Registrar shall reflect on its books and records the date and a decrease in the Principal Amount of such Global Security in an amount equal to the Principal Amount of the beneficial interest in such Global Security to be transferred, and the Company shall execute, and the Trustee shall authenticate and make available for delivery, one or more Physical Securities of like tenor and amount.

(e) In connection with the transfer of an entire Global Security to beneficial owners pursuant to paragraph (b) of this Section, such Global Security shall be deemed to be surrendered to the Trustee for cancellation, and the Company shall execute, and upon receipt of a Company Order the Trustee shall authenticate and deliver, to each beneficial owner identified by the Depositary in exchange for its beneficial interest in such Global Security, an equal Principal Amount of Physical Securities of authorized denominations.

(f) The registered holder of a Global Security may grant proxies and otherwise authorize any person, including Agent Members and persons that may hold interests through Agent Members, to take any action which a Holder is entitled to take under this Indenture or the Securities of such series.

SECTION 3.09. Mutilated, Defaced, Destroyed, Lost and Stolen Securities. In case any temporary or definitive Security shall become mutilated, defaced or be apparently destroyed, lost or stolen, the Company in its discretion may execute a new Security of the same series bearing a number not contemporaneously outstanding, the applicable Guarantors, if any, shall execute the Guarantees endorsed thereon and, upon the written request of any officer of the Company and delivery to the Trustee of all documents and certificates as required by this Indenture, the Trustee shall authenticate and make available for delivery such Security, in exchange and substitution for the mutilated or defaced Security, or in lieu of and substitution for the Security so apparently destroyed, lost or stolen. In every case the applicant for a substitute Security shall furnish to the Company, each Guarantor, if any, the Trustee and any of their respective agents, such security or indemnity as may be required by each of them to indemnify and defend and to save each of them harmless and, in every case of destruction, loss or theft evidence to their satisfaction of the apparent destruction, loss or theft of such Security and of the ownership thereof.

Upon the issuance of any substitute 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 which has matured or is about to mature, or has been called for redemption in full, shall become mutilated or defaced or be apparently destroyed, lost or stolen, the Company may, instead of issuing a substitute Security of the same series, pay or authorize the payment of the same (without surrender thereof except in the case of a mutilated or defaced Security), if the applicant for such payment shall furnish to the Company, each Guarantor, if any, the Trustee and any of their respective agents such Security or indemnity as any of them may require to save each of them harmless from all risks, however remote, and, in every case of apparent destruction, loss or theft, the applicant shall also furnish to the Company, each such Guarantor, the Trustee and any of such agents evidence to their satisfaction of the apparent destruction, loss or theft of such Security and of the ownership thereof.

Every substitute Security and the Guarantee endorsed thereon, if any, issued pursuant to the provisions of this Section by virtue of the fact that any Security is apparently destroyed, lost or stolen shall constitute an additional contractual obligation of the Company and any Guarantor, as applicable, whether or not the apparently destroyed, lost or stolen Security shall be at any time enforceable by anyone and shall be entitled to all the benefits of (but shall be subject to all the limitations of rights set forth in) this Indenture equally and proportionately with any and all other Securities and the Guarantees endorsed thereon, if any, duly authenticated and delivered hereunder. All Securities shall be held and owned upon the express condition that, to the extent permitted by law, with respect to the holder of a substitute Security, the foregoing provisions are exclusive with respect to the replacement or payment of mutilated, defaced, or apparently destroyed, lost or stolen Securities and shall preclude 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 3.10. Cancellation of Securities. All Securities surrendered for payment, redemption, registration of transfer or exchange, if surrendered to the Company, any Guarantor, the Trustee or any of their respective agents, shall 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 permitted by any of the provisions of this Indenture. The Trustee shall dispose of cancelled Securities in accordance with its customary procedures. If the Company or any Guarantor shall acquire any of the Securities, 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 3.11. Temporary Securities. Pending the preparation of definitive Securities of any series, the Company may execute and the Trustee shall authenticate and make available for delivery temporary Securities of such series (printed, lithographed, typewritten or otherwise reproduced, in each case in form satisfactory to the Trustee). Temporary Securities shall be issuable as registered Securities of such series without coupons, of any authorized denomination, and substantially in the form of the definitive Securities of such series, and if the Securities are to be guaranteed, having endorsed thereon the Guarantees executed by each Guarantor, but in all cases with such appropriate omissions, insertions and variations as may be appropriate for temporary Securities, all as may be determined by the Company and the Guarantors, if any, with the concurrence of the Trustee. Temporary Securities may contain such reference to any provisions of this Indenture as may be appropriate. Every temporary Security shall be executed by the Company and endorsed by each Guarantor, if any, 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 unreasonable delay the Company shall execute and shall furnish definitive Securities of such series and thereupon temporary Securities of such series may be surrendered in exchange therefor without charge at each office or agency to be maintained by the Company for the purpose pursuant to Section 4.02, and upon delivery to the Trustee of all documents and certificates as required by this Indenture, the Trustee shall authenticate and make available for delivery in exchange for such temporary Securities a like aggregate principal amount of definitive Securities of such series of authorized denominations, and if the Securities are guaranteed, having endorsed thereon the Guarantees executed by each Guarantor. 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.

SECTION 3.12. CUSIP and ISIN Numbers. The Company in issuing the Securities of any series may use a "CUSIP" and "ISIN" number (if then generally in use), and, if so, the Trustee shall use the CUSIP numbers or ISIN numbers, as the case may be, in notices of redemption or exchange as a convenience to Holders of such series; provided that any such notice shall state that no representation is made as to the correctness of such numbers either as printed on the Securities or as contained in any notice of redemption or exchange and that reliance may be placed only on the other identification numbers printed on the Securities and any such redemption shall not be affected by any defect in or omission of such numbers. The Company shall promptly notify the Trustee of any change in the CUSIP numbers or ISIN numbers.

Article 4
CERTAIN COVENANTS

SECTION 4.01. Payment of Principal, Premium and Interest on Securities. The Company, for the benefit of each series of the Securities, will duly and punctually pay or cause to be paid the principal of and any premium and interest on the Securities of that series in accordance with the terms of such Securities and this Indenture.

SECTION 4.02. Maintenance of Office or Agency. The Company will maintain a Payment Office where Securities may be presented or surrendered for payment, where Securities may be surrendered for registration of transfer or exchange, and where notices and demands to or upon the Company in respect of the Securities and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location of, such office or agency. 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, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee, and the Company hereby initially appoints the Trustee at its office or agency as its agent to receive all such presentations, surrenders, notices and demands.

The Company may also from time to time designate one or more other offices or agencies where the Securities of one or more series may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; provided that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in accordance with the requirements set forth above for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency.

SECTION 4.03. Money for Securities Payments to be Held in Trust.

(a) If the Company shall at any time act as its own Paying Agent with respect to any series of Securities, it will, on or before each due date of the principal of or any premium or interest on any of the Securities of that series, segregate and hold in trust for the benefit of the Persons entitled thereto a sum sufficient to pay the principal and any premium and interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided and will promptly notify the Trustee of its action or failure so to act.

(b) 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 or any premium or interest on any Securities of that series, deposit with a Paying Agent a sum sufficient to pay such amount, such sum to be held as provided by the Trust Indenture Act, and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.

(c) The Company will cause each Paying Agent for any series of Securities (other than the Trustee) to execute and deliver to the Trustee an instrument in which such Paying Agent will agree with the Trustee, subject to the provisions of this Section 4.03, that such Paying Agent will (i) comply with the provisions of the Trust Indenture Act applicable to it as a Paying Agent; (ii) hold all sums held by it for the payment of the principal of (and premium, if any) or interest, if any, on the Securities of that series in trust for the benefit of the Holders until such sums shall be paid to such Holders or otherwise disposed of as herein provided; (iii) give the Trustee notice of any Default by the Company or any Guarantor (or any other obligor upon the Securities) in the making of any payment of principal (and premium, if any) or interest, if any, on the Securities of that series; and (iv) during the continuance of any Default by the Company (or any other obligor upon the Securities of that series) in the making of any payment in respect of the Securities of that series, and upon the written request of that Trustee, forthwith pay to the Trustee all sums held in trust by such Paying Agent for payment in respect of the Securities of that series.

(d) 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 by Company Order 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 trusts as those upon which such sums were held by the Company or such Paying Agent; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent will be released from all further liability with respect to such money.

(e) Any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of or any premium or interest on any Security of any series and remaining unclaimed for two years after such principal, premium, or interest has become due and payable and was deposited with the Paying Agent will be paid to the Company upon a Company Request (or, if then held by the Company, will be discharged from such trust) subject to any applicable abandoned property law; and the Holder of such Security will thereafter, as an unsecured general creditor, look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money will thereupon cease.

SECTION 4.04. Existence. Subject to Article 10, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its existence and rights (charter and statutory); provided that the Company will not be required to preserve any such right or franchise if the Board of Directors determines that the preservation thereof is no longer desirable in the conduct of the business of the Company and that the loss thereof will not be disadvantageous in any material respect to the Holders.

SECTION 4.05. Statement by Officers as to Default. The Company and, to the extent required by the TIA, each Guarantor, if any, will deliver to the Trustee, within 120 calendar days after the end of each fiscal year of the Company ending after the first date any series of Securities issued under this Indenture is outstanding, a certificate signed by the principal executive officer, principal financial officer or principal accounting officer of the Company or such Guarantor stating whether or not to the knowledge of such person after due inquiry the Company or such Guarantor is in default in the performance and observance of any of the terms, provisions, and conditions of this Indenture (without regard to any period of grace or requirement of notice provided hereunder) and, if the Company or such Guarantor is in default, specifying all such defaults and the nature and status thereof of which such person may have such knowledge. The Company or such Guarantor shall deliver to the Trustee, as soon as possible and in any event within seven calendar days after any such aforementioned officer of the Company or such Guarantor becomes aware of the occurrence of any Event of Default or an event which, with notice or the lapse of time or both, would constitute an Event of Default, an Officers' Certificate setting forth the details of such Event of Default or default and the action which the Company or such Guarantor proposes to take with respect thereto.

SECTION 4.06. Waiver of Certain Covenants. The Company and each Guarantor, if any, may omit in any particular instance to comply with any term, provision, or condition set forth in this Indenture or any applicable supplemental indenture, with respect to the Securities of any series, if the Holders of a majority in Principal Amount of all outstanding Securities of such series shall, by act of such Holders in accordance with Section 7.01, either waive such compliance in such instance or generally waive compliance with such term, provision, or condition in accordance with Article 9 and Section 5.07, but no such waiver will extend to or affect such term, provision or condition except to the extent so expressly waived, and, until such waiver shall become effective, the obligations of the Company and such Guarantor and the duties of the Trustee in respect of any such term, provision, or condition will remain in full force and effect.

Article 5
REMEDIES OF THE TRUSTEE AND HOLDERS ON EVENT OF DEFAULT

SECTION 5.01. Events of Default. Each of the following events constitutes an "Event of Default" wherever used herein with respect to Securities of any series:

(a) default for 30 calendar days in the payment when due of interest on the Securities of that series;

(b) default in payment when due of the principal (whether at Stated Maturity, upon redemption (if applicable), upon any required repurchase by the Company (if applicable) or otherwise) of or premium, if any, on the Securities of that series;

(c) default by the Company or any Guarantor of such series of Securities in the observance or performance of any other covenant or agreement contained in this Indenture or as specified pursuant to Section 3.01 (other than a default referred to in clauses (a) or (b) above, or an agreement, covenant or provision that has expressly been included in this Indenture solely for the benefit of one or more series of Securities other than that series) which default continues for a period of 60 calendar days after the Company or such Guarantor receives written notice specifying the default (and demanding that such default be remedied) from the Trustee or the Holders of at least 25% of the Principal Amount of Securities of that series then outstanding (with a copy to the Trustee if given by Holders) (except in the case of a default with respect to Section 10.01 of this Indenture, which will constitute an Event of Default with such notice requirement but without such passage of time requirement).

(d) the entry by a court having jurisdiction in the premises of (i) a decree or order for relief in respect of the Company or a Guarantor of such series of Securities in an involuntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization, or other similar law or (ii) a decree or order adjudging the Company or such Guarantor bankrupt or insolvent, or approving as properly filed a petition seeking reorganization, arrangement, adjustment, or composition of or in respect of the Company or such Guarantor under

any applicable federal or state law, or appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator, or other similar official of the Company or such Guarantor or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree or order for relief or any such other decree or order unstayed and in effect for a period of 60 consecutive calendar days;

(e) the commencement by the Company or a Guarantor of such series of Securities of a voluntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization, or other similar law or of any other case or proceeding to be adjudicated bankrupt or insolvent, or the consent by it to the entry of a decree or order for relief in respect of the Company or such Guarantor in an involuntary case or proceeding under any applicable federal or state bankruptcy, insolvency, reorganization, or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief with respect to the Company or such Guarantor under any applicable federal or state bankruptcy, insolvency, reorganization, or other similar law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator, or other similar official of the Company or such Guarantor or of any substantial part of its property pursuant to any such law, or the making by it of an assignment for the benefit of creditors, or the admission by it in writing of its inability to pay its debts generally as they become due, or the taking of corporate action by the Company or such Guarantor in furtherance of any such action;

(f) any Guarantee relating to such series Securities shall cease to be in full force and effect (other than in accordance with the terms of this Indenture) or any Guarantor denies or disaffirms its obligations under its Guarantee; or

(g) any other Event of Default with respect to Securities of that series as specified pursuant to Section 3.01, which shall not have been remedied within the specified period after written notice, as specified in Section 5.01(c).

SECTION 5.02. Acceleration.

(a) If any Event of Default (other than an Event of Default specified in clause (d) or (e) of Section 5.01) occurs and is continuing with respect to Securities of any series, the Trustee by written notice to the Company or the Holders of at least 25% in aggregate Principal Amount of the then outstanding Securities of that series by written notice to the Company and the Trustee, may declare the unpaid principal of, premium, if any, and any accrued and unpaid interest on all the Securities of the affected series to be due and payable immediately. Except as set forth above, upon such declaration the principal of, premium, if any, and interest shall be due and payable immediately. If an Event of Default specified in clause (d) or (e) of Section 5.01 occurs with respect to the Company or any Guarantor, the unpaid principal of, premium, if any, and any accrued and unpaid interest on all the Securities shall *ipso facto* become and be immediately due and payable without further action or notice on the part of the Trustee or any Holder.

(b) At any time after such a declaration of acceleration with respect to the Securities of any series has been made and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter in this Article 5 provided, the Holders of a majority in Principal Amount of the outstanding Securities of such series, by written notice to the Company and the Trustee, may rescind and annul such declaration and its consequences if (i) the Company or a Guarantor has paid or deposited with the Trustee a sum sufficient to pay (A) all overdue interest on all of the Securities of that series, (B) the principal of (and premium, if any, on) Securities of that series which has become due otherwise than by such declaration of acceleration and any interest thereon at the rate or rates prescribed therefor in the Securities of that series, (C) to the extent that payment of such interest is lawful, interest upon overdue interest at the rate or rates prescribed therefor in the Securities of that series, and (D) all sums paid or advanced by the Trustee hereunder and the reasonable compensation, expenses, disbursements and advances of the Trustee and its agents and counsel and (ii) all Events of Default with respect to the Securities of that series, other than the non-payment of the principal of the Securities of that series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 5.04. No such rescission will affect any subsequent default or impair any right consequent thereon.

SECTION 5.03. Other Remedies. If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may pursue any available remedy to collect the payment of principal or interest on the

Securities of such series or to enforce the performance of any provision of the Securities of such series or this Indenture.

The Trustee may maintain a proceeding even if it does not possess any of the Securities of such series or does not produce any of them in the proceeding and any such 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 the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders of the Securities in respect of which such judgment has been recovered. A delay or omission by the Trustee or any Holder in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default. All remedies are cumulative to the extent permitted by law.

SECTION 5.04. Waiver of Past Defaults. The Holders of not less than a majority in aggregate Principal Amount of the Securities of any series then outstanding by written notice to the Trustee may on behalf of the Holders of all of the Securities of such series waive any existing Default or Event of Default and its consequences under this Indenture except a continuing Default or Event of Default in the payment of the principal (whether at Stated Maturity, upon redemption (if applicable), upon any required repurchase by the Company (if applicable) or otherwise) of (and premium, if any) or interest, if any, on any Security of such series or, in the case of the Securities of any series that are convertible or exchangeable, in the payment or delivery of any consideration due upon conversion or exchange of the Securities of that series (if applicable). The Company may, but shall not be obligated to, fix a record date for the purpose of determining the Persons entitled to waive any past Default hereunder. If a record date is fixed, the Holders on such record date, or their duly designated proxies, and only such Persons, shall be entitled to waive any Default hereunder, whether or not such Holders remain Holders after such record date. Upon any such waiver, such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other Default or impair any right consequent thereon.

SECTION 5.05. Control by Majority. With respect to the Securities of any series, the Holders of a majority in aggregate Principal Amount of the then outstanding Securities of that series may 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 it. However, the Trustee may refuse to follow any direction that conflicts with law or this Indenture, that the Trustee in good faith determines may be unduly prejudicial to the rights of other Holders of that series or that may involve or cause the Trustee any potential liability. The Trustee may take any other action which it deems proper which is not inconsistent with any such direction.

SECTION 5.06. Limitation on Suits. A Holder of any Security of any series may pursue a remedy with respect to this Indenture or the Securities of the applicable series only if:

(a) the Holder gives to the Trustee written notice of a continuing Event of Default with respect to that series;

(b) the Holders of at least 25% in aggregate Principal Amount of the then outstanding Securities of that series make a written request to the Trustee to pursue the remedy;

(c) such Holder or Holders provide to the Trustee indemnity satisfactory to the Trustee against any loss, liability or expense in connection with the pursuance of such remedy;

(d) during the 60-day period specified in (e) below, the Holders of a majority in aggregate Principal Amount of the then outstanding Securities of such series do not give the Trustee a direction inconsistent with the request; and

(e) the Trustee does not comply with the request within 60 calendar days after receipt of the notice, request and the offer of indemnity.

Holders shall not have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture or any Security to affect, disturb or prejudice the rights of any other such Holders or Holders of Securities of any other series, or to obtain or to seek to obtain priority or preference over any other Holders or to

enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all such Holders.

SECTION 5.07. Rights of Holders to Receive Payment. Notwithstanding any other provision of this Indenture, the right of any Holder to receive payment of principal (whether at Stated Maturity, upon redemption (if applicable), upon any required repurchase by the Company (if applicable) or otherwise) of (and premium, if any) and interest, if any, on any Security or, if applicable, payment or delivery of any consideration due upon conversion or exchange of any Security, in each case, on or after the respective due dates expressed in such Security, or to bring suit for the enforcement of any such payment or delivery on or after such respective dates, shall not be impaired or affected without the consent of the Holder.

SECTION 5.08. Collection Suit by Trustee. If an Event of Default specified in Sections 5.01(a) and 5.01(b) occurs and is continuing, the Trustee is authorized to recover judgment in its own name and as trustee of an express trust against the Company, any Guarantor or any other obligor for the whole amount of principal (and premium, if any) and interest, if any, remaining unpaid on any Securities of such series and interest on overdue principal and, to the extent lawful, interest and such further amount as shall be sufficient to cover amounts due the Trustee under Section 6.07 hereof, including the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

SECTION 5.09. Trustee May File Proofs of Claim. The Trustee is authorized to file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and the Holders allowed in any judicial proceedings relative to the Company or any Guarantor (or any other obligor upon the Securities), its creditors or its property and shall be entitled and empowered to collect, receive and distribute any money or other property payable or deliverable on any such claims and any custodian in any such judicial proceeding is hereby authorized by each Holder to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 6.07 hereof. To the extent that the payment of any such compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 6.07 hereof out of the estate in any such proceeding, shall be denied for any reason, payment of the same shall be secured by a lien on, and shall be paid out of, any and all distributions, dividends, money, securities and other properties which the Holders may be entitled to receive in such proceeding whether in liquidation or under any plan of reorganization or arrangement or otherwise. Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Securities of any series or the rights of any Holder thereof, or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

SECTION 5.10. Priorities. If the Trustee collects any money pursuant to this Article, it shall pay out the money in the following order:

First: to the Trustee, its agents and attorneys for amounts due under Section 6.07, including payment of all compensation, expense and liabilities incurred, and all advances made, by the Trustee and the costs and expenses of collection;

Second: to Holders for amounts due and unpaid on the Securities of any series for principal (and premium, if any) and interest, if any, ratably, without preference or priority of any kind, according to the amounts due and payable on the Securities of such series for principal (and premium, if any) and interest, if any, respectively; and

Third: to the Company or, to the extent the Trustee collects any amount pursuant to Section 2.02 hereof from a Guarantor, to such Guarantor, or to such party as a court of competent jurisdiction shall direct.

The Trustee may fix a record date and payment date for any payment to Holders pursuant to this Section 5.10 upon seven calendar days prior notice to the Company.

SECTION 5.11. Undertaking for Costs. 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 a Trustee, a court in its discretion may require the filing by any party litigant in the suit of an undertaking to pay the costs of the suit, and the court in its discretion may assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in the suit, having due regard to the merits and good faith of the claims or defenses made by the party litigant. This Section 5.11 does not apply to a suit by the Trustee, a suit by a Holder of Securities of the affected series pursuant to Section 5.07 hereof, a suit by Holders of more than 10% in aggregate Principal Amount of the then outstanding Securities of any series in the case of any suit relating to or arising under clause (a), (b), (c), (f) or (g) of Section 5.01, or a suit by Holders of more than 10% in aggregate Principal Amount of the then outstanding Securities of all series in the case of any suit relating to or arising under clause (d) or (e) of Section 5.01.

SECTION 5.12. Restoration of Rights and Remedies. If the Trustee or any Holder has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, subject to any determination in such proceeding, the Company, any Guarantor, the Trustee and the Holders shall be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding has been instituted.

SECTION 5.13. Rights and Remedies Cumulative. Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities in the last paragraph of Section 3.09, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

SECTION 5.14. Delay or Omission Not Waiver. No delay or omission of the Trustee or of any Holder of Securities of any series to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders, as the case may be.

Article 6
THE TRUSTEE

SECTION 6.01. Duties and Responsibilities of the Trustee; During Default; Prior to Default. The Trustee, with respect to the Securities of any series, prior to the occurrence of an Event of Default with respect to the Securities of such series and after the curing or waiving of all Events of Default with respect to the Securities of such series which may have occurred, undertakes to perform such duties and only such duties with respect to such series as are specifically set forth in this Indenture. In case an Event of Default with respect to the Securities of a series has occurred (and is continuing which has not been cured or waived) the Trustee shall exercise such of the rights and powers vested in it by this Indenture with respect to such series, 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.

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, provided that:

(a) the duties and obligations of the Trustee shall be determined solely by the express provisions of this Indenture, and the Trustee shall not be liable 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;

(b) in the absence of bad faith on the part of the Trustee, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any statements, certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such statements, certificates or opinions which 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 any calculation or facts stated therein);

(c) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it shall be conclusively determined by a court of competent jurisdiction or by such other means as may be agreed by the Company and the Trustee at the time of determination that the Trustee was negligent in ascertaining the pertinent facts; and

(d) 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 a Company Order or the direction of the Holders given as provided in Section 5.05 or otherwise exercising any trust or power conferred upon the Trustee, under this Indenture.

None of the provisions contained in this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any potential or actual liability (financial or otherwise) in the performance of any of its duties or in the exercise of any of its rights or powers, if there shall be reasonable ground for believing that the repayment of such funds or adequate indemnity against such liability is not assured to it. This Section 6.01 is in furtherance of and subject to Sections 315 and 316 of the Trust Indenture Act.

Whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Article 6.

SECTION 6.02. Certain Rights of the Trustee. In furtherance of and subject to the Trust Indenture Act, and subject to Section 6.01:

(a) the Trustee may conclusively rely and shall be protected in acting or refraining from acting upon any resolution, Officers' Certificate, Opinion of Counsel or any other certificate, statement, instrument, opinion, report, notice, request, consent, order, bond, debenture, note, coupon, security or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties;

(b) any request, direction, order or demand of the Company mentioned herein shall be sufficiently evidenced by an Officers' Certificate (unless other evidence in respect thereof be herein specifically prescribed) and the Trustee may request and be entitled to receive an Officers' Certificate before acting or refraining from acting with respect to such request, direction, order or demand; and any resolution of the Board of Directors of the Company or a Guarantor, if any, may be evidenced to the Trustee by a copy thereof certified by the Secretary or an Assistant Secretary of the Company or that Guarantor;

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

(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 Holders of the Securities of any series pursuant to the provisions of this Indenture, unless such Holders shall have offered and provided to the Trustee security or indemnity satisfactory to it against the costs, expenses and liabilities which might be incurred therein or thereby;

(e) the Trustee shall not be liable for any action taken or omitted by it in good faith and believed by it to be authorized or within the discretion, 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, appraisal, bond, debenture, note, coupon, security, or other paper or document unless requested in writing so to do by the Holders of not less than a majority in aggregate Principal Amount of the Securities of any series then outstanding; provided that, if the payment within a reasonable time to the Trustee of the costs, expenses or liabilities likely to be incurred by it in the making of such investigation is, in the opinion of the Trustee, not assured to the Trustee by the security afforded to it by the terms of this Indenture, the Trustee may require (and shall not be required to make such

investigation unless it receives) indemnity satisfactory to it against such expenses or liabilities as a condition to proceeding; the reasonable expenses of every such examination shall be paid by the Company;

(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 not regularly in its employ and the Trustee shall not be responsible for any misconduct or negligence on the part of any such agent or attorney appointed with due care by it hereunder;

(h) the rights, privileges, protections, immunities and benefits given to the Trustee under this Indenture, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder, and to each agent, custodian and other Person employed to act hereunder and the employees, officers and directors of the Trustee;

(i) (i)the Trustee shall not be deemed to have knowledge of any Default or Event of Default unless a Responsible Officer of the Trustee has received from a Holder, the Company or any Guarantor written notice of any event which is in fact such a Default or Event of Default, as the case may be, and such notice references the Securities, this Indenture, the circumstances giving rise to such a Default or Event of Default and that the same has occurred and is continuing; and

(j) The Trustee may request that the Company deliver an Officers' Certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture, which Officers' Certificate may be signed by any person authorized to sign an Officers' Certificate, including any person specified as so authorized in any such certificate previously delivered and not superseded.

SECTION 6.03. Trustee Not Responsible for Recitals, Disposition of Securities or Application of Proceeds Thereof. The recitals contained herein and in the Securities, except the Trustee's certificates of authentication, shall be taken as the statements of the Company, and the Trustee assumes no responsibility for the correctness of the same. The Trustee makes no representation as to the validity or sufficiency of this Indenture or of the Securities, except that the Trustee represents, that it is duly authorized to execute and deliver this Indenture, authenticate the Securities and perform its obligations hereunder and that the statements made by it in a Statement of Eligibility on Form T-1 supplied to the Company, are true and accurate, subject to the qualifications set forth therein. The Trustee shall not be liable or accountable in any manner for the use or application by the Company of any of the Securities or of the proceeds thereof.

SECTION 6.04. Trustee and Agents May Hold Securities; Collections, Etc. The Trustee or any of its affiliates or any agent of the Company or the Trustee, in its individual or any other capacity, may become the owner or pledgee of Securities, subject to Sections 6.10 and 6.13 with the same rights it would have if it were not the Trustee or such agent and may otherwise deal with the Company, any Guarantor or their respective affiliates and receive, collect, hold and retain collections from the Company with the same rights it would have if it were not the Trustee or such agent. However, in the event that the Trustee acquires any "conflicting interest," as defined in Section 310(b) of the Trust Indenture Act, it must eliminate such conflict within 90 calendar days, apply to the Commission for permission to continue as trustee or resign.

SECTION 6.05. Moneys Held by Trustee. 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 mandatory provisions of law. Neither the Trustee nor any agent of the Company or the Trustee shall be under any liability for interest on any moneys received by it hereunder, except as otherwise agreed with the Company.

SECTION 6.06. Notice of Default. If any Default or any Event of Default occurs and is continuing with respect to the Securities of any series and if such Default or Event of Default is actually known to a Responsible Officer of the Trustee, the Trustee shall mail to each Holder of Securities of such series in the manner and to the extent provided in Trust Indenture Act Section 313(c) notice of the Default or Event of Default ("Notice of Default") within 90 calendar days after it occurs, unless such Default or Event of Default has been cured; provided that, except in the case of a default in the payment of the principal (whether at Stated Maturity, upon redemption (if applicable), upon any required repurchase by the Company (if applicable) or otherwise) of, or interest or premium, if any, on any Security of such series, in the payment or delivery of any consideration due upon conversion or

exchange of any Security of such series (if applicable) or in the payment of any sinking fund installment with respect to Securities of such series, the Trustee shall be protected in withholding such notice if and so long as the board of directors, the executive committee or a trust committee of directors and/or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interest of the Holders of Securities of such series.

SECTION 6.07. Compensation and Indemnification of Trustee and Its Prior Claim. The Company covenants and agrees to pay to the Trustee from time to time, and the Trustee shall be entitled to, such compensation as shall be agreed in writing between the Company and the Trustee (which shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust) and the Company covenants and agrees to pay or reimburse the Trustee and each predecessor Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by or on behalf of it in accordance with any of the provisions of this Indenture (including the reasonable compensation and the expenses and disbursements of its counsel and of all agents and other persons not regularly in its employ) except any such expense, disbursement or advance as may arise from its negligence or bad faith (as determined by a court of competent jurisdiction in a final, non-appealable decision or by such other means as may be agreed by the Company and the Trustee at the time of determination). The Company also covenants to indemnify the Trustee and each predecessor Trustee for, and to hold it harmless against, any and all loss, liability, damage, claim or expense, including taxes (other than taxes based on the income of the Trustee) incurred without negligence or bad faith on its part (as determined by a court of competent jurisdiction in a final, non-appealable decision or by such other means as may be agreed by the Company and the Trustee at the time of determination), arising out of or in connection with the acceptance or administration of this Indenture or the trusts hereunder and its duties hereunder, including without limitation the costs and expenses of defending itself against or investigating any claim (whether asserted by the Company, a Holder or any other Person). The obligations of the Company under this Section to compensate and indemnify the Trustee and each predecessor Trustee and to pay or reimburse the Trustee and each predecessor Trustee for expenses, disbursements and advances shall constitute additional indebtedness hereunder and shall survive the satisfaction and discharge of this Indenture. Such financial obligations of the Company identified in this Section 6.07 shall be a senior claim to that of the Securities of each series, and as security for such obligations, the Trustee shall have a lien prior to such 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, and the Securities of each series are hereby subordinated to such senior claim. Such lien shall survive the discharge and satisfaction of this Indenture.

When the Trustee incurs expenses or renders services in connection with an Event of Default specified in Section 5.01(d) or Section 5.01(e), the expenses (including the reasonable charges and expenses of its counsel) and the compensation for the services are intended to constitute expenses of administration under any applicable federal or state bankruptcy, insolvency or other similar law.

SECTION 6.08. Right of Trustee to Rely on Officers' Certificate, Etc. Subject to Sections 6.01 and 6.02, whenever in the administration of the trusts of this Indenture the Trustee shall deem it necessary or desirable that a matter be proved or established prior to taking or suffering or omitting any action hereunder, such matter (unless other evidence in respect thereof be herein specifically prescribed) may, in the absence of negligence or bad faith on the part of the Trustee, be deemed to be conclusively proved and established by an Officers' Certificate delivered to the Trustee, and such certificate, in the absence of negligence or bad faith on the part of the Trustee, shall be full warrant to the Trustee for any action taken, suffered or omitted by it under the provisions of this Indenture upon the faith thereof.

SECTION 6.09. Persons Eligible for Appointment as Trustee. The Trustee hereunder shall at all times be a corporation, national association or other appropriate entity having a combined capital and surplus of at least $150,000,000, and which is eligible in accordance with the provisions of Section 310(a) of the Trust Indenture Act. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of a federal, state or District of Columbia supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published.

SECTION 6.10. Resignation and Removal; Appointment of Successor Trustee.

(a) The Trustee may at any time resign with respect to the Securities of one or more series by giving written notice of resignation to the Company and to the Holders of Securities of such series, such notice to the Holders to be given by mailing (by first class mail) the same within 30 calendar days after such notice is given to the Company. Upon receiving such notice of resignation, the Company shall promptly appoint a successor trustee by written instrument in duplicate, executed by authority of the Board of Directors of the Company, 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 calendar days after the mailing of such notice of resignation, the resigning trustee may petition, at the expense of the Company, any court of competent jurisdiction for the appointment of a successor trustee, or any Holder of the affected series who has been a bona fide holder of the Securities of the affected series for at least six months (or since the Issue Date for such Securities if the holding period is less than six months) may, on behalf of itself 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 of the following shall occur:

(i) the Trustee shall fail to comply with the provisions of Section 310(b) of the Trust Indenture Act, after written request therefor by the Company or by any Holder who has been a bona fide holder of Securities of the affected series for at least six months; or

(ii) the Trustee shall cease to be eligible in accordance with the provisions of Section 6.09, and shall fail to resign after written request therefor by the Company or by any such Holder; or

(iii) the Trustee shall become incapable of acting, or shall be adjudged as bankrupt or insolvent, or a receiver or liquidator of the Trustee or of its property shall be appointed, 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 and appoint a successor trustee by written instrument, in duplicate, executed by authority of the Board of Directors of the Company, one copy of which instrument shall be delivered to the Trustee so removed and one copy to the successor trustee, or, subject to Section 315(e) of the Trust Indenture Act, any Holder of the affected series who has been a bona fide holder of the Securities of the affected series for at least six months may, on behalf of itself 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 for that series and appoint a successor trustee by delivering to the Trustee so removed, to the successor trustee so appointed and to the Company and any Guarantor the evidence provided for in Section 7.01 of the action in that regard taken by the Holders of that series.

If no successor trustee shall have been so appointed and have accepted appointment 30 calendar days after the mailing of such notice of removal, the Trustee being removed may petition, at the expense of the Company, any court of competent jurisdiction 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.

(d) Any resignation or removal of the Trustee and any appointment of a successor trustee pursuant to any of the provisions of this Section 6.10 shall become effective upon acceptance of appointment by the successor trustee as provided in Section 6.11.

(e) The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series by mailing written notice of such event by first-class mail, postage prepaid, to all Holders of Securities of such series as their names and addresses appear in the Security Register. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

SECTION 6.11. 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 payment of its fees, costs, expenses and other charges, 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, any applicable Guarantor, 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 (1) 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, (2) if the retiring Trustee is not retiring with respect to all Securities, 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 (3) 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 and 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 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 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 upon payment of its fees, costs, expenses and other charges duly assign, transfer and deliver to such successor Trustee all 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 and any applicable Guarantor 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 the Trust Indenture Act.

SECTION 6.12. Merger, Conversion, Consolidation or Succession to Business of Trustee. Any corporation or national association into which the Trustee may be merged or converted or with which it may be consolidated, or to which the Trustee's assets may be sold, or any corporation or national association resulting from any merger, conversion, consolidation or sale to which the Trustee shall be a party or by which the Trustee's property may be bound, or any corporation or national association succeeding to all or substantially all the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided that such entity shall be eligible under the provisions of Section 6.09, 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 at the time such successor to the Trustee shall succeed to the trusts created by this Indenture any of the Securities shall have been authenticated but not delivered, any such successor to the Trustee may adopt the certificate of authentication of any predecessor Trustee and deliver such Securities so authenticated; and, in case at that time any of the Securities shall not have been authenticated, any successor to the Trustee may authenticate such Securities either in the name of any predecessor hereunder or in the name of the successor Trustee; and in all such cases such certificate shall have the full force that it is anywhere in the Securities or in this Indenture ; provided that the right to adopt the certificate of authentication of any predecessor Trustee or to authenticate Securities in the

name of any predecessor Trustee shall apply only to its successor or successors by merger, conversion or consolidation.

SECTION 6.13. Preferential Collection of Claims. If the Trustee shall be or shall become a creditor, directly or indirectly, secured or unsecured, of the Company (or any other obligor on the Securities), the Trustee shall be subject to the provisions of Section 311 of the Trust Indenture Act regarding the collection of claims against the Company (or any such other obligor). For purposes of Section 311(b) (4) and (6) of such Act, the following terms shall mean:

(a) "cash transaction" means any transaction in which full payment for goods or securities sold is made within seven calendar days after delivery of the goods or securities in currency or in checks or other orders drawn upon banks or bankers and payable upon demand; and

(b) "self-liquidating paper" means any draft, bill of exchange, acceptance or obligation which is made, drawn, negotiated or incurred by the Company for the purpose of financing the purchase, processing, manufacturing, shipment, storage or sale of goods, wares or merchandise and which is secured by documents evidencing title to, possession of, or a lien upon, the goods, wares or merchandise or the receivables or proceeds arising from the sale of the goods, wares or merchandise previously constituting the security, provided the security is received by the Trustee simultaneously with the creation of the creditor relationship with the Company arising from the making, drawing, negotiating or incurring of the draft, bill of exchange, acceptance or obligation.

SECTION 6.14. Communications with the Trustee. Any and all notices, certificates, opinions or filings with the Commission required or permitted to be provided by the Company to the Trustee under this Indenture shall be in writing and shall be personally delivered, sent via an internationally recognized overnight delivery service or sent by facsimile or electronic transmission to the address or telecopy number of the Corporate Trust Office.

SECTION 6.15. Paying Agent/Registrar. If the Trustee is acting as Paying Agent and/or Registrar hereunder, the rights and protections afforded to the Trustee under this Article 6 will also be afforded to the Paying Agent and/or the Registrar.

Article 7
CONCERNING THE HOLDERS

SECTION 7.01. Evidence of Action Taken by Holders. Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders of Securities of any series may be embodied in and evidenced (a) by one or more instruments of substantially similar tenor signed by such Holders in person or by agent duly appointed in writing, (b) by the record of the Holders of Securities of such series voting in favor thereof at any meeting of Holders duly called and held in accordance with the provisions of Article 8, or (c) by a combination of such instrument or instruments and any such record of such a meeting of Holders; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Trustee and, where it is hereby expressly required, to the Company and each Guarantor, if any. Proof of execution of any instrument or of a writing appointing any such agent shall be sufficient for any purpose of this Indenture and (subject to Sections 6.01 and 6.02) conclusive in favor of the Trustee, the Company and each Guarantor, if any, if made in the manner provided in this Article.

SECTION 7.02. Proof of Execution of Instruments and of Holding of Securities; Record Date. Subject to Sections 6.01 and 6.02, the execution of any instrument by a Holder or its agent or proxy may be proved in accordance with such reasonable rules and regulations as may be prescribed by the Trustee or in such manner as shall be satisfactory to the Trustee. The holding of Securities shall be proved by the Security Register or by a certificate of the Registrar thereof. The Company may set a record date for purposes of determining the identity of Holders of Securities entitled to vote or consent to any action referred to in Section 7.01, which record date may be set at any time or from time to time by notice to the Trustee, for any date or dates (in the case of any adjournment or resolicitation) not more than 90 calendar days nor less than 20 calendar days prior to the proposed date of such vote or consent, and thereafter, notwithstanding any other provisions hereof, only Holders of Securities of record on such record date shall be entitled to so vote or give such consent or to withdraw such vote or consent.

SECTION 7.03. Who May Be Deemed Owners of Securities. The Company, each Guarantor, if any, the Trustee, any Paying Agent and any Registrar may deem and treat the person in whose name any Security of any series shall be registered in the Security Register on the applicable record date as the absolute owner of such Security (whether or not such Security shall be overdue and notwithstanding any notation of ownership or other writing thereon) for the purpose of receiving payment of or on account of the principal of (and premium, if any) and interest, if any, on such Security and for all other purposes; and none of the Company, any Guarantor, the Trustee, any Paying Agent or any Registrar shall be affected by any notice to the contrary. All such payments so made to, or upon the order of, any Holders shall be valid, and, to the extent of the sum or sums so paid, effectual to satisfy and discharge the liability of moneys payable upon any such Security.

SECTION 7.04. Securities Owned by Company Deemed Not Outstanding. In determining whether the Holders of the requisite aggregate Principal Amount of Securities of any series have concurred in any direction, consent or waiver under this Indenture, Securities of such series which are owned by the Company, any Guarantor with respect to such series or any other obligor on the Securities of such series or by any person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company, any such Guarantor or any other obligor on the Securities of such 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 which a Responsible Officer of the Trustee actually knows are so owned shall be so disregarded. Securities so owned which have been pledged in good faith may be regarded as outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee's right so to act with respect to such Securities and that the pledgee is not the Company, any Guarantor or any other obligor upon the Securities or any person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company, any Guarantor or any other obligor on the Securities. In case of a dispute as to such right, the advice of counsel shall be full protection in respect of any decision made by the Trustee in accordance with such advice. Upon request of the Trustee, the Company shall furnish to the Trustee promptly an Officers' Certificate listing and identifying all Securities of any series, if any, known by the Company to be owned or held by or for the account of any of the above-described persons; and, subject to Sections 6.01 and 6.02, the Trustee shall be entitled to accept such Officers' Certificate as conclusive evidence of the facts therein set forth and of the fact that all Securities of such series not listed therein are outstanding for the purpose of any such determination.

SECTION 7.05. Record Date for Action by Holders. Whenever in this Indenture it is provided that Holders of a specified percentage in aggregate principal amount of the Securities of any series may take any action (including the making of any demand or request, the giving of any direction, notice, consent or waiver or the taking of any other action), other than any action taken at a meeting of Holders of such series called pursuant to Article 8, the Company may, but shall not be obligated to, fix a record date, which need not be the date provided in TIA Section 316(c) to the extent it would otherwise be applicable, for the purpose of determining the Holders entitled to give their consent or take any other action described above or required or permitted to be taken pursuant to this Indenture. If a record date is fixed, then notwithstanding Section 7.06, those Persons who were Holders at such record date (or their duly designated proxies), and only those Persons, shall be entitled to give such consent or to revoke any consent previously given or to take any such action, whether or not such Persons continue to be Holders after such record date. No such consent shall be valid or effective for more than 90 days after such record date.

SECTION 7.06. Right of Revocation of Action Taken. At any time prior to (but not after) the evidencing to the Trustee, as provided in Section 7.01, of the taking of any action by the Holders of the percentage in aggregate Principal Amount of the Securities of any series specified in this Indenture in connection with such action, any Holder of a Security the serial number of which is shown by the evidence to be included among the serial numbers of the Securities of the series the Holders of which have consented to such action may, by filing written notice at the Corporate Trust Office and upon proof of holding as provided in this Article 7, 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 Securities issued in exchange or substitution therefor, irrespective of whether or not any notation in regard thereto is made upon any such Security. Any action taken by the Holders of the percentage in aggregate Principal Amount of the Securities of any series specified in this Indenture in connection with such action shall be conclusively binding upon the Company, each Guarantor with respect to such series, if any, the Trustee and the Holders of all the Securities of such series.

Article 8
MEETINGS OF HOLDERS

SECTION 8.01. Purposes for Which Meeting May Be Called. A meeting of Holders of Securities of any series may be called at any time and from time to time pursuant to the provisions of this Article 8 for any of the following purposes:

(a) to give any notice to the Company, any Guarantor or to the Trustee, or to give any directions to the Trustee, or to consent to the waiving of any Default or Event of Default with respect to the Securities of such series hereunder and its consequences, or take any other action authorized to be taken by Holders of such series pursuant to any of the provisions of Article 5;

(b) to remove the Trustee and appoint a successor trustee with respect to the Securities of such series pursuant to the provisions of Article 6;

(c) to consent to the execution of an indenture or indentures supplemental hereto pursuant to the provisions of Section 9.02; or

(d) to take any other action authorized to be taken by or on behalf of the Holders of the percentage in aggregate Principal Amount of the Securities of such series under any other provisions of this Indenture or under applicable law.

SECTION 8.02. Manner of Calling Meetings; Record Date. The Trustee may at any time call a meeting of Holders of any series to take any action specified in Section 8.01, to be held at such time and at such place in [•], or as the Trustee shall determine. Notice of every meeting of Holders of any series setting forth the time and the place of such meeting and in general terms the action proposed to be taken at such meeting, shall be mailed not less than 30 nor more than 60 calendar days prior to the date fixed for the meeting to such Holders at their registered addresses. For the purpose of determining Holders entitled to notice of any meeting of Holders, the Trustee shall fix in advance a date as the record date for such determination, such date to be a Business Day not more than 10 calendar days prior to the date of the mailing of such notice as hereinabove provided. Only persons in whose name a Security of such series is registered upon the books of the Company on a record date fixed by the Trustee as aforesaid, or by the Company or the Holders as in Section 8.03 provided, shall be entitled to notice of the meeting of Holders with respect to which such record date was so fixed.

SECTION 8.03. Call of Meeting by Company or Holders. In case at any time the Company or a Guarantor, if any, pursuant to a resolution of its Board of Directors, or the Holders of at least 10 percent in aggregate principal amount of the Securities of any series then outstanding, shall have requested the Trustee to call a meeting of the Holders of such series to take any action authorized in Section 8.01 by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have mailed notice of such meeting within 20 calendar days after receipt of such request, then the Company, any such Guarantor or the Holders of Securities of such series in the amount above specified may fix the record date with respect to, and determine the time and the place for, such meeting and may call such meeting to take any action authorized in Section 8.01, by mailing notice thereof as provided in Section 8.02. The record date fixed as provided in the preceding sentence shall be set forth in a written notice to the Trustee and shall be a Business Day not less than 15 nor more than 20 calendar days after the date on which such notice is sent to the Trustee.

SECTION 8.04. Who May Attend and Vote at Meeting. To be entitled to vote at any meeting of Holders of any series, a person shall be a Holder of one or more Securities of such series. The only persons who shall be entitled to be present or to speak at any meeting of Holders of any series shall be the persons entitled to vote at such meeting and their counsel, any representatives of the Trustee and its counsel, any representatives of the Company and its counsel, and any representatives of any Guarantor of such Securities and its counsel. When a determination of Holders entitled to vote at any meeting of Holders has been made as provided in this Section 8.04, such determination shall apply to any adjournment thereof.

SECTION 8.05. Regulations. Notwithstanding any other provisions of this Indenture, the Trustee may make such reasonable regulations as it may deem advisable for any meeting of Holders of any series, in regard to proof of the holding of the Securities of such series and of the appointment of proxies, and in regard to the

appointment and duties of inspectors of votes, the submission and examination of proxies, certificates and other evidence of the right to vote, and such other matters concerning the conduct of the meeting as it shall think fit. Except as otherwise permitted or required by any such regulations, the holding of the Securities of such series shall be provided in the manner specified in Section 8.06.

The Trustee shall, by an instrument in writing, appoint a temporary chairman of the meeting, unless the meeting shall have been called by the Company or by Holders as provided in Section 8.03, in which case the Company or the Holders calling the meeting, as the case may be, shall in like manner appoint a temporary chairman. A permanent chairman and a permanent secretary of the meeting shall be elected by a vote of the Holders of a majority in Principal Amount of the Securities represented at the meeting and entitled to vote.

Subject to the provisions of Section 7.04, at any meeting each Holder or proxy entitled to vote thereat shall be entitled to one vote for each $1,000 principal amount of Securities of such series held or represented by him; provided that no vote shall be cast or counted at any meeting in respect of any Security challenged as not outstanding and ruled by the chairman of the meeting to be not outstanding. The chairman of the meeting shall have no right to vote other than by virtue of Securities held by him or instruments in writing as aforesaid duly designating him as the person to vote on behalf of other Holders. Any meeting of Holders duly called pursuant to the provisions of Section 8.02 or 8.03 may be adjourned from time to time, and the meeting may be held as so adjourned without further notice.

At any meeting of Holders of any series, the presence of persons who held, or who are acting as proxy for persons who held, an aggregate Principal Amount of Securities of such series on the record date for such meeting sufficient to take action on the business for the transaction of which such meeting was called shall constitute a quorum, but, if less than a quorum is present, the persons holding or representing a majority in aggregate Principal Amount of the Securities of such series represented at the meeting may adjourn such meeting with the same effect, for all intents and purposes, as though a quorum had been present.

SECTION 8.06. Manner of Voting at Meetings and Record to be Kept. The vote upon any resolution submitted to any meeting of Holders of any series shall be by written ballots on each of which shall be subscribed the signature of the Holder or proxy casting such ballot and the identifying number or numbers of the Securities of such series held or represented in respect of which such ballot is cast. The permanent chairman of the meeting shall appoint two inspectors of votes who shall count all votes cast at the meeting for or against any resolution and who shall make and file with the secretary of the meeting their verified written reports in duplicate of all votes cast at the meeting. A record in duplicate of the proceedings of each meeting of Holders shall be prepared by the secretary of the meeting and there shall be attached to said record the original reports of the inspectors of votes on any vote by ballot taken thereat and affidavits by one or more persons having knowledge of the facts setting forth a copy of the notice of the meeting and showing that said notice was mailed as provided in Section 8.02. The record shall show the identifying numbers of the Securities of such series voting in favor of or against any resolution. Each counterpart of such record shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one of the counterparts shall be delivered to the Company and the other to the Trustee to be preserved by the Trustee.

Any counterpart record so signed and verified shall be conclusive evidence of the matters therein stated and shall be the record referred to in clause (b) of Section 7.01.

SECTION 8.07. Exercise of Rights of Trustee and Holders Not to be Hindered or Delayed. Nothing in this Article 8 contained shall be deemed or construed to authorize or permit, by reason of any call of a meeting of Holders or any rights expressly or impliedly conferred hereunder to make such call, any hindrance or delay in the exercise of any right or rights conferred upon or reserved to the Trustee or to the Holders of any series under any of the provisions of this Indenture or of the Securities of such series.

Article 9
SUPPLEMENTAL INDENTURES

SECTION 9.01. Supplemental Indentures Without Consent of Holders. The Company, the Guarantors, if any, and the Trustee may amend or supplement this Indenture or the Securities of any series or waive any provision hereof or thereof without the consent of any Holder:

(a) to cure any ambiguity, defect or inconsistency in a manner that does not, individually or in the aggregate with all other changes, adversely affect the rights of any Holder of the Securities of any series in any material respect;

(b) to provide for uncertificated Securities in addition to or in place of certificated Securities;

(c) to evidence the assumption of the obligations of the Company or a Guarantor to the Holders of the Securities in the case of any transaction pursuant to Article 10 hereof;

(d) to evidence and provide for the acceptance of appointment hereunder by a successor trustee and to add to or change any of the provisions of the Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one trustee;

(e) to make any change that would provide any additional rights or benefits to the Holders of all or any series of Securities or that does not adversely affect the legal rights hereunder of any such Holder;

(f) to comply with requirements of the Commission in order to effect or maintain the qualification of this Indenture under the Trust Indenture Act;

(g) to establish the form or terms of Securities of any series as permitted by Sections 2.01 and 3.01;

(h) to secure the Company's obligations in respect of the Securities of any series;

(i) to add an additional Guarantor in respect of the Securities of any series.

(j) in the case of convertible or exchangeable Securities of any series, subject to the provisions of the supplemental indenture for such series of Securities, to provide for conversion rights, exchange rights and/or repurchase rights of Holders of such series of Securities in connection with any reclassification or change of the Company's common stock or in the event of any amalgamation, consolidation, merger or sale of all or substantially all of the assets of the Company or its Subsidiaries substantially as an entirety occurs;

(k) in the case of convertible or exchangeable Securities of any series, to reduce the conversion price or exchange price applicable to such series of Securities;

(l) in the case of convertible or exchangeable Securities of any series, to increase the conversion rate or exchange ratio in the manner described in the supplemental indenture for such series of Securities, provided that the increase will not adversely affect the interests of the Holders of the Securities of such series in any material respect; or

(m) any other action to amend or supplement the Indenture or the Securities of any series as set forth in the supplemental indenture establishing the terms of the Securities of that series as provided in Section 3.01(b).

Upon the request of the Company accompanied by a resolution of its Board of Directors authorizing the execution of any such supplemental indenture, and upon receipt by the Trustee of the documents described in Section 9.04 hereof, the Trustee shall join with the Company and the Guarantors, if any, in the execution of any supplemental indenture authorized or permitted by the terms of this Indenture and to make any further appropriate agreements and stipulations which may be therein contained, but the Trustee shall not be obligated to enter into such supplemental indenture which affects its own rights, duties or immunities under this Indenture or otherwise.

SECTION 9.02. With Consent of Holders. Except as provided in the next succeeding paragraphs, this Indenture or the Securities may be amended or supplemented with the consent of the Holders of at least a majority in aggregate Principal Amount of all the Securities then outstanding affected by such supplemental indenture (acting as a single class).

Upon the request of the Company accompanied by a resolution of its Board of Directors authorizing the execution of any such supplemental indenture, and upon the filing with the Trustee of evidence satisfactory to the Trustee of the consent of the Holders as aforesaid, and upon receipt by the Trustee of the documents described in Section 9.04 hereof, the Trustee shall join with the Company and the Guarantors, if any, 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.

It shall not be necessary for the consent of the Holders under this Section 9.02 to approve the particular form of any proposed amendment or waiver, but it shall be sufficient if such consent approves the substance thereof.

After an amendment, supplement or waiver under this Section becomes effective, the Company shall mail to the Holders affected thereby a notice briefly describing the amendment, supplement or waiver. Any failure of the Company to mail such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture or waiver. Subject to Sections 5.02(b), 5.04 and 5.07 hereof, the application of or compliance with, either generally or in a particular instance, of any provision of this Indenture or the Securities may be waived as to each series of Securities by the Holders of a majority in aggregate principal amount of the outstanding Securities of that series.

Without the consent of each Holder affected hereby, however, an amendment or waiver may not:

(a) reduce the percentage in Principal Amount of Securities of any series whose Holders must consent to an amendment, supplement or waiver;

(b) change the Stated Maturity of the principal of, or any installment of principal of or interest on, or time for payment of interest on, any Security, or reduce the Principal Amount thereof or the rate of interest thereon or any premium payable upon the redemption thereof, or change any Payment Office where, or the coin or currency in which, any Security or any premium or interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption, on or after the redemption date);

(c) modify any of the provisions of this Section 9.02, Section 5.04 or Section 4.06, except to increase the percentage in Principal Amount of Holders required under any such Section or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each outstanding Security affected thereby, provided that this clause (c) will not be deemed to require the consent of any Holder with respect to changes in the references to "the Trustee" and concomitant changes in this Section 9.02, Section 5.02(b), Section 5.04 and Section 4.06, or the deletion of this proviso, in accordance with the requirements of Section 6.11;

(d) impair the rights of Holders of the Securities of any series that are exchangeable or convertible to receive payment or delivery of any consideration due upon the conversion or exchange of the Securities of that series;

(e) change in any manner adverse to the interests of the Holders of any outstanding Securities the terms and conditions of the obligations of the Guarantors, if applicable, in respect of the due and punctual payment of the principal thereof (and premium, if any, thereon) and interest thereon or any additional amounts or any sinking fund or analogous payments provided in respect thereof; or

(f) modify or amend any of the provisions of the Indenture or Securities of any series as may be set forth in the supplemental indenture with respect to the Securities of that series as requiring the consent of each Holder affected thereby.

SECTION 9.03. Effect of Supplemental Indenture. Upon the execution of any supplemental indenture pursuant to the provisions hereof, this Indenture shall 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, each Guarantor, if any, and the Holders 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.

SECTION 9.04. Documents to Be Given to Trustee; Compliance with TIA. The Trustee, subject to the provisions of Sections 6.01 and 6.02, shall be entitled to receive and conclusively rely upon an Officers' Certificate

and an Opinion of Counsel as conclusive evidence that any such supplemental indenture is permitted or authorized under and otherwise complies with the applicable provisions of this Indenture. Every such supplemental indenture shall comply with the TIA.

SECTION 9.05. Notation on Securities in Respect of Supplemental Indentures. Securities authenticated and delivered after the execution of any supplemental indenture pursuant to the provisions of this Article may bear a notation approved by the Trustee as to form (but not as to substance) as to any matter provided for by such supplemental indenture or as to any action taken at any such meeting. If the Company, any applicable Guarantor or the Trustee shall so determine, new Securities of any series so modified as to conform, in the opinion of the Trustee and the Board of Directors of the Company, to any modification of this Indenture contained in any such supplemental indenture may be prepared by the Company, endorsed by any such Guarantor, authenticated by the Trustee and delivered in exchange for the Securities of such series then outstanding.

Article 10
CONSOLIDATION, MERGER OR SALE OF ASSETS

SECTION 10.01. When the Company May Merge, Etc. The Company shall not consolidate with or merge with or into, or sell, transfer, lease, convey or otherwise dispose of all or substantially all of its assets to, another Person (including pursuant to a statutory arrangement), whether in a single transaction or series of related transactions, unless:

(a) the Company is the surviving entity or the Person formed by or surviving any such consolidation or merger or to which such sale, transfer, lease, conveyance or other disposition is made shall be a Person organized and existing under the laws of the United States of America or any State or the District of Columbia, and shall expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, the due and punctual payment of the principal of (and premium, if any) and interest, if any, on all the Securities and the performance or observance of every covenant of this Indenture of the part of the Company to be performed or observed;

(b) immediately after giving effect to such transaction, no Event of Default, and no event which, after notice or lapse of time, or both, would become an Event of Default, shall have happened and be continuing; and

(c) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel each stating that such consolidation, merger, conveyance or transfer and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture comply with this Article and that all conditions precedent herein provided for relating to such transaction have been complied with.

SECTION 10.02. Successor Person Substituted. Upon any consolidation or merger, or any sale, transfer, lease, conveyance or other disposition of all or substantially all of the assets of the Company in accordance with Section 10.01 hereof, the successor Person formed by such consolidation or into or with which the Company is merged or to which such sale, transfer, lease, conveyance or other disposition is made shall succeed to, and, except in the case of a lease, be substituted for (so that from and after the date of such consolidation, merger, sale, transfer, conveyance or other disposition, the provisions of this Indenture referring to the "Company" shall refer instead to the successor Person), and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein.

In case of any such consolidation, merger, sale, transfer, lease, conveyance 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. Notwithstanding the foregoing, (i) a consolidation or merger by the Company with or into, or (ii) the sale, transfer, lease, conveyance or other disposition by the Company of all or substantially all of its assets to, one or more of its Subsidiaries shall not relieve the Company from its obligations under this Indenture and the Securities.

SECTION 10.03. Opinion of Counsel to Trustee. The Trustee, subject to the provisions of Sections 6.01 and 6.02, may receive an Opinion of Counsel as conclusive evidence that any such consolidation, merger, sale, transfer, lease, conveyance or other disposition complies with the applicable provisions of this Indenture.

Article 11
REDEMPTION OF SECURITIES

SECTION 11.01. Applicability of Article. Securities of any series which are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 3.01 for Securities of any series) in accordance with this Article.

SECTION 11.02. Notice of Redemption; Partial Redemptions. Notice of redemption to the Holders of Securities of any series to be redeemed as a whole or in part shall be given by mailing notice of such redemption by first class mail, postage prepaid, at least 30 calendar days and not more than 60 calendar days prior to the date fixed for redemption to such Holders of Securities at their last addresses as they shall appear upon the registry books. Any notice which is mailed in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the Holder receives the notice. Failure to give notice by mail, or any defect in the notice to the Holder of any Security designated for redemption as a whole or in part shall not affect the validity of the proceedings for the redemption of any other Security.

The notice of redemption to each such Holder shall identify the Securities to be redeemed (including CUSIP numbers) and shall specify the Principal Amount of each Security held by such Holder to be redeemed, the date fixed for redemption, the redemption price, the place or places of payment, that payment will be made upon presentation and surrender of such Securities, that interest accrued to the date fixed for redemption will be paid as specified in said notice and that on and after said date interest thereon or on the portions thereof to be redeemed will cease to accrue. In case any Security is to be redeemed in part only the notice of redemption shall state the portion of the Principal Amount thereof to be redeemed and shall state that on and after the date fixed for redemption, upon surrender of such Security, a new Security or Securities in Principal Amount equal to the unredeemed portion thereof will be issued.

The notice of redemption of Securities of any series to be redeemed at the option of the Company shall be given by the Company or, at the Company's request, by the Trustee in the name and at the expense of the Company.

No later than 10:00 a.m. New York City time on the redemption date specified in the notice of redemption given as provided in this Section, the Company will deposit with the Trustee or with one or more Paying Agents (or, if the Company is acting as its own Paying Agent, set aside, segregate and hold in trust) an amount of money sufficient to redeem on the redemption date all the Securities of a series so called for redemption at the appropriate redemption price, together with accrued interest to the date fixed for redemption. The Company will deliver to the Trustee at least 30 calendar days prior to the date fixed for redemption an Officers' Certificate stating the aggregate Principal Amount of Securities of such series to be redeemed.

If less than all the Securities of a series are to be redeemed, the Trustee shall select, either pro rata, by lot or by any other method it shall deem fair and reasonable, Securities to be redeemed in whole or in part. Securities may be redeemed in part only in denominations equal to the minimum authorized denomination for Securities of that series or any integral multiple thereof. The Trustee shall promptly notify the Company in writing of the Securities selected for redemption and, in the case of any Securities selected for partial redemption, the Principal Amount thereof to be redeemed. For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to the redemption of Securities shall relate, in the case of any Security redeemed or to be redeemed only in part, to the portion of the Principal Amount of such Security which has been or is to be redeemed.

SECTION 11.03. Payment of Securities Called for Redemption. If notice of redemption has been given as above provided, the Securities or portions of Securities 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, but not including, the date fixed for redemption, and on and after said date (unless the Company and any Guarantors shall default in the payment of such Securities at the redemption price, together with interest accrued to said date) interest on the Securities or portions of Securities so called for redemption shall cease to accrue and, except as provided in Sections 6.05 and 12.06, such Securities shall cease from and after the date fixed for redemption to be entitled to any benefit or security under this Indenture, and the Holders thereof shall have no right in respect of such Securities except the right to receive the redemption price thereof and unpaid interest to the date fixed for redemption. On presentation and surrender of such Securities at a Payment Office specified in said notice, said Securities or the specified portions thereof shall be paid and redeemed by the Company at the applicable redemption

price, together with interest accrued thereon to, but not including, the date fixed for redemption; provided that any payment of interest becoming due on the date fixed for redemption shall be payable to the Holders of such Securities registered as such on the relevant Regular Record Date subject to the terms and provisions of Section 3.05 hereof.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal shall, until paid or duly provided for, bear interest from the date fixed for redemption at the rate borne by the Security.

Upon presentation of any Securities redeemed in part only, the Company shall execute, the Guarantors, if any, shall, execute the Guarantees endorsed thereon, and the Trustee shall authenticate and make available for delivery to or on the order of the Holder thereof, at the expense of the Company, new Securities of authorized denominations, in Principal Amount equal to the unredeemed portion of the Securities so presented.

Article 12
DEFEASANCE AND COVENANT DEFEASANCE

SECTION 12.01. Applicability of the Article; Company's Option to Effect Defeasance or Covenant Defeasance. Unless pursuant to Section 3.01 provision is made for the inapplicability of either or both of (a) defeasance of the Securities of a series under Section 12.02 or (b) covenant defeasance of the Securities of a series under Section 12.03, then the provisions of such Section or Sections, as the case may be, together with the other provisions of this Article, shall be applicable to the Securities of such series, and the Company may, at its option, by resolution of its Board of Directors, at any time, elect to have either Section 12.02 or Section 12.03 applied to the outstanding Securities of a series upon compliance with the conditions set forth below in this Article 12.

SECTION 12.02. Legal Defeasance and Discharge. Upon the Company's exercise of the option provided under Section 12.01 hereof to defease the outstanding Securities of a particular series under this Section 12.02, the Company and any Guarantors shall be deemed to have been discharged from its obligations with respect to such outstanding Securities and related Guarantees on the date the conditions set forth below are satisfied (hereinafter, "Legal Defeasance"). For this purpose, such Legal Defeasance means that the Company shall be deemed to have paid and discharged the entire indebtedness represented by the outstanding Securities of such series, which shall thereafter be deemed to be "outstanding" only for the purposes of Section 12.05 hereof and the other Sections of this Indenture referred to in clauses (i) and (ii) of this Section 12.02, and to have satisfied all its other obligations under such Securities and this Indenture (and the Trustee, on demand of and at the expense of the Company shall execute proper instruments acknowledging the same), except for the following provisions which shall survive until otherwise terminated or discharged hereunder: (i) the rights of Holders of outstanding Securities of such series to receive solely from the trust fund described in Section 12.04 hereof, and as more fully set forth in such Section, payments in respect of the principal of (and premium, if any) and interest, if any, on such Securities when such payments are due, (ii) the obligations of the Company or any Guarantor with respect to such Securities under Sections 3.06, 3.07, 3.08(a), 3.09, 3.11, and 12.05 hereof, (iii) the rights, powers, trusts, duties and immunities of the Trustee hereunder, including, without limitation, the Trustee's rights under Section 6.07 hereof, and the obligations of the Company or any Guarantor in connection therewith and with this Article 12. Subject to compliance with this Article 12, the Company may exercise its option under this Section 12.02 notwithstanding the prior exercise of its option under Section 12.03 hereof with respect to the Securities of such series.

SECTION 12.03. Covenant Defeasance. Upon the Company's exercise of the option provided under Section 12.01 hereof to obtain a covenant defeasance with respect to the outstanding Securities of a particular series under this Section 12.03, the Company and any Guarantors shall be released from their obligations under the covenants contained in Article 4 and Section 10.01 hereof and the covenants contained in any supplemental indenture applicable to such series, with respect to the outstanding Securities of such series on and after the date the conditions set forth below are satisfied (hereinafter, "Covenant Defeasance"), and the Securities of such series shall thereafter be deemed not outstanding for the purposes of any direction, waiver, consent or declaration or act of Holders (and the consequences of any thereof) in connection with such covenants, but shall continue to be deemed outstanding for all other purposes hereunder. For this purpose, such Covenant Defeasance means that, with respect to the outstanding Securities of such series, the Company or any Guarantors may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such covenant or by reason of any reference in any such covenant to any other provision herein or in any other document and such omission to comply shall not

constitute a Default or an Event of Default under Section 5.01(c) or Section 5.01(g) with respect to outstanding Securities of such series, but, except as specified above, the remainder of this Indenture and of the Securities of such series shall be unaffected thereby.

SECTION 12.04. Conditions to Legal or Covenant Defeasance. The following shall be the conditions to the application of either Section 12.02 or Section 12.03 hereof to the outstanding Securities of a particular series:

(a) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee satisfying the requirements of Section 6.09 who shall agree to comply with the provisions of this Article 12 applicable to it) as trust funds in trust for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to, the benefit of the Holders of such Securities, (i) an amount (in such currency, currencies or currency unit in which such Securities and any related coupons are then specified as payable at Stated Maturity), or (ii) non-callable Government Securities that through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than one day before the due date of any payment, cash in Dollars in an amount, or (iii) a combination thereof, in such amounts as will be 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 and discharge and which shall be applied by the Trustee (or other qualifying trustee) to pay and discharge the principal of (and premium, if any) and interest, if any, on such outstanding Securities on the stated maturity date of such principal or installment of principal, or interest or premium, if any.

(b) In the case of an election under Section 12.02 hereof, the Company shall have delivered to the Trustee an Opinion of Counsel confirming that (i) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or (ii) since the date hereof, there has been a change in the applicable federal income tax law, in either case to the effect that, and based thereon such Opinion of Counsel shall confirm that, the Holders of the outstanding Securities of such series will not recognize income, gain or loss for federal income tax purposes as a result of such Legal Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Legal Defeasance had not occurred.

(c) In the case of an election under Section 12.03 hereof, the Company shall have delivered to the Trustee an Opinion of Counsel confirming that the Holders of the outstanding Securities of such series will not recognize income, gain or loss for federal income tax purposes as a result of such Covenant Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred.

(d) No Default or Event of Default (or event that, with the giving of notice or lapse of time or both would become an Event of Default) with respect to the Securities of such series shall have occurred and be continuing on the date of such deposit or, insofar as Section 5.01(d) or 5.01(e) hereof is concerned, at any time in the period ending on the 124th calendar day after the date of such deposit (it being understood that this condition shall not be deemed satisfied until the expiration of such period).

(e) Such Legal Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under any material agreement or instrument (other than this Indenture) to which the Company or any Guarantor is a party or by which the Company or such Guarantor is bound (other than a breach, violation or default resulting from the borrowing of funds to be applied to such deposit).

(f) The Company shall have delivered to the Trustee an Officers' Certificate stating that the deposit made by the Company pursuant to its election under Section 12.02 or 12.03 hereof was not made by the Company with the intent of preferring the Holders of the affected Securities over the other creditors of the Company with the intent of defeating, hindering, delaying or defrauding creditors of the Company, or others.

(g) Such Legal Defeasance or Covenant Defeasance shall be effected in compliance with any additional terms, conditions or limitations which may be imposed on the Company in connection therewith pursuant to Section 3.01.

(h) The Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent provided for relating to either the Legal Defeasance under Section

12.02 hereof or the Covenant Defeasance under Section 12.03 hereof (as the case may be) have been complied with as contemplated by this Section 12.04.

SECTION 12.05. Deposited Money and Government Securities to be Held in Trust; Other Miscellaneous Provisions. Subject to Section 12.06 hereof, all money and non-callable Government Securities (including the proceeds thereof) deposited with the Trustee pursuant to Section 12.04 hereof in respect of the outstanding Securities of a particular series shall be held in trust and applied by the Trustee, in accordance with the provisions of such Securities, the Guarantees, if any, relating to such series of Securities and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as Paying Agent) as the Trustee may determine, to the Holders of such Securities of all sums due and to become due thereon in respect of principal (and premium, if any) and interest, if any, but such money need not be segregated from other funds except to the extent required by law.

The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the cash or non-callable Government Securities deposited pursuant to Section 12.04 hereof or the principal and interest received in respect thereof other than any such tax, fee or other charge that by law is for the account of the Holders of the outstanding Securities of such series.

Anything in this Article 12 to the contrary notwithstanding, the Trustee shall deliver or pay to the Company from time to time upon the Company's request any money or non-callable Government Securities held by it as provided in Section 12.04 hereof with respect to the Securities of any series which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee (which may be the opinion delivered under Section 12.04(a) hereof), are in excess of the amount thereof which would then be required to be deposited to effect an equivalent Legal Defeasance or Covenant Defeasance.

SECTION 12.06. Repayment to the Company or Guarantor. Any money deposited with the Trustee or any Paying Agent, or then held by the Company or applicable Guarantor, in trust for the payment of the principal of (and premium, if any) and interest, if any, on any Security and remaining unclaimed for two years after such principal, or interest or premium, if any, has become due and payable and was deposited with the Paying Agent shall be paid to the Company or such Guarantor on its written request (or if then held by the Company or such Guarantor) will be discharged from such trust) subject to any applicable abandoned property law; and the Holder of such Security shall thereafter, as an unsecured general creditor, look only to the Company or such Guarantor for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company or such Guarantor as trustee thereof, shall thereupon cease.

SECTION 12.07. Reinstatement. If the Trustee or Paying Agent is unable to apply any Dollars or non-callable Government Securities in accordance with Section 12.02 or 12.03 hereof, as the case may be, by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the obligations of the Company and the applicable Guarantors under this Indenture, the Securities and any Guarantees shall be revived and reinstated as though no deposit had occurred pursuant to Section 12.02 or 12.03 hereof until such time as the Trustee or Paying Agent is permitted to apply all such money in accordance with Section 12.02 or 12.03 hereof, as the case may be; provided that, if the Company or any Guarantor makes any payment of principal of, or interest or premium, if any, on any Security following the reinstatement of its obligations, the Company or any Guarantor shall be subrogated to the rights of the Holders of such Security to receive such payment from the money held by the Trustee or Paying Agent.

Article 13
SATISFACTION AND DISCHARGE

SECTION 13.01. Satisfaction and Discharge of Indenture. This Indenture shall upon a Company Request cease to be of further effect with respect to any series of Securities (except, as to any surviving rights of registration of transfer, exchange or conversion of Securities of such series herein expressly provided for or in the form of Security for such series and any rights to receive payment of interest thereon), and the Trustee, on demand of and at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture, when:

(a) either

(i) all Securities of such series theretofore authenticated and delivered (other than (A) Securities which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 3.09, and (B) Securities for whose payment money has theretofore been (x) deposited in trust or segregated and held in trust by the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 4.03(c) or (y) paid to any State or the District of Columbia pursuant to its unclaimed property or similar laws) have been delivered to the Trustee for cancellation; or

(ii) all such Securities not theretofore delivered to the Trustee for cancellation

(A) have become due and payable (whether at Stated Maturity, upon redemption (if applicable), upon any required repurchase by the Company (if applicable) or otherwise), or

(B) will become due and payable at their stated maturity within one year, or

(C) are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Company, and the Company, in the case of (A), (B) or (C) above, has deposited or caused to be deposited with the Trustee, as trust funds in trust for the purpose, money in the amount in the currency or currency units in which the Securities of such series are payable, sufficient to pay and discharge the entire indebtedness on such Securities not theretofore delivered to the Trustee for cancellation, for principal (and premium, if any) and interest, if any, to the date of such deposit (in the case of Securities which have become due and payable), or to the Stated Maturity or redemption date, as the case may be;

(b) the Company or a Guarantor, if any, has paid or caused to be paid all other sums payable hereunder by the Company or the Guarantors, if any; and

(c) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 6.07 and, if money shall have been deposited with the Trustee pursuant to subclause (ii) of clause (a) of this Section, the obligations of the Trustee under Section 13.02 and Section 4.03(e) shall survive.

SECTION 13.02. Application of Trust Money. Subject to the provisions of Section 4.03(e), all money deposited with the Trustee pursuant to Section 13.01 shall be held in trust and applied by it, in accordance with the provisions of the Securities, the Guarantees, if any, relating to such series of Securities and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent), as the Trustee may determine, to the Persons entitled thereto, of the principal (and premium, if any) and interest, if any, for whose payment such money has been deposited with the Trustee.

Article 14
HOLDERS' LISTS AND REPORTS BY TRUSTEE, COMPANY AND GUARANTORS

SECTION 14.01. Company to Furnish Trustee Names and Addresses of Holders. The Company will furnish or cause to be furnished to the Trustee:

(a) semi-annually, not later than 15 calendar days after the Regular Record Date for each series of Securities, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of Securities as of such Regular Record Date (unless the Trustee has such information), or if there is no Regular Record Date for interest for such series of Securities, semi-annually, upon such dates as are set forth in the Board Resolution of the Company or indenture supplemental hereto authorizing such series, and

(b) at such other times as the Trustee may request in writing, within 30 calendar 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 calendar days prior to the time such list is furnished;

provided that so long as the Trustee is the Registrar, no such list shall be required to be furnished.

SECTION 14.02. Preservation of Information; Communications to Holders.

(a) The Trustee shall preserve, in as current a form as is reasonably practicable, the names and addresses of Holders contained in the most recent list furnished to the Trustee as provided in Section 14.01 and the names and addresses of Holders received by the Trustee in its capacity as the Registrar. The Trustee may destroy any list furnished to it as provided in Section 14.01 upon receipt of a new list so furnished.

(b) If three or more Holders (herein referred to as "applicants") apply in writing to the Trustee, and furnish to the Trustee reasonable proof that each such applicant has owned a Security for a period of at least six months preceding the date of such application (or since the first date of the issuance for such Security, if the holding period is less than six months), and such application states that the applicants desire to communicate with other Holders with respect to their rights under this Indenture or under the Securities and is accompanied by a copy of the form of proxy or other communication which such applicants propose to transmit, then the Trustee shall, within five Business Days after the receipt of such application, at its election, either

(i) afford such applicants access to the information preserved at the time by the Trustee in accordance with Section 14.02(a); or

(ii) inform such applicants as to the approximate number of Holders whose names and addresses appear in the information preserved at the time by the Trustee in accordance with Section 14.02(a), and as to the approximate cost of mailing to such Holders the form of proxy or other communication, if any, specified in such application.

If the Trustee shall elect not to afford such applicants access to such information, the Trustee shall, upon the written request of such applicants, mail to each Holder whose name and address appears in the information preserved at the time by the Trustee in accordance with Section 14.02(a) a copy of the form of proxy or other communication which is specified in such request, with reasonable promptness after a tender to the Trustee of the material to be mailed and of payment, or provision for the payment, of the reasonable expenses of mailing, unless within five Business Days after such tender the Trustee shall mail to such applicants and file with the Commission, together with a copy of the material to be mailed, a written statement to the effect that, in the opinion of the Trustee, such mailing would be contrary to the best interest of the Holders or would be in violation of applicable law. Such written statement shall specify the basis of such opinion. If the Commission, after opportunity for a hearing upon the objections specified in the written statement so filed, shall enter an order refusing to sustain any of such objections or if, after the entry of an order sustaining one or more of such objections, the Commission shall find, after notice and opportunity for hearing, that all objections so sustained have been met and shall enter an order so declaring, the Trustee shall mail copies of such material to all such Holders with reasonable promptness after the entry of such order and the renewal of such tender; otherwise the Trustee shall be relieved of any obligation or duty to such applicants respecting their application.

(c) Every Holder of Securities, by receiving and holding the same, agrees with the Company, any applicable Guarantor and the Trustee that none of the Company, such Guarantors and the Trustee nor any of their respective agents shall be held accountable by reason of the disclosure of any such information as to the names and addresses of the Holders in accordance with Section 14.02(b), regardless of the source from which such information was derived, and that the Trustee shall not be held accountable by reason of mailing any material pursuant to a request made under Section 14.02(b).

SECTION 14.03. Reports by the Trustee.

(a) The Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required pursuant to the Trust Indenture Act at the times and in the manner provided pursuant thereto. If required by Section 313(a) of the Trust Indenture Act, the Trustee shall, within 60 calendar days

after each May 15th following the date of this Indenture (commencing May 15, [□]) deliver to Holders a brief report, dated as of such May 15th, which complies with the provisions of such Section 313(a).

(b) (b) A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each securities exchange upon which Securities of any series are listed, with the Commission and with the Company. The Company will promptly notify the Trustee when any Securities are listed on any securities exchange and of any delisting thereof.

SECTION 14.04. Reports by the Company and Guarantors. The Company shall furnish to the Trustee, within 15 calendar days after it actually files such annual and quarterly reports, information, documents and other reports with the Commission, copies of its annual report and of the information, documents and other reports (or copies of such portions of any of the foregoing the Commission may by rules and regulations prescribe) that the Company is required to file with the Commission pursuant to Section 13 or 15(d) of the Exchange Act; provided that any such annual and quarterly reports, information, documents and other reports and information filed with the Commission may be provided by the Company to the Trustee electronically. The Company and any Guarantor shall comply with the other provisions of TIA Section 314(a). Delivery of such information, documents and reports to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates). It is expressly understood that materials transmitted electronically by the Company to the Trustee or filed pursuant to the Commission's EDGAR system (or any successor electronic filing system) shall be deemed filed with the Trustee and transmitted to Holders for purposes of this Section 14.04.

Article 15
MISCELLANEOUS PROVISIONS

SECTION 15.01. Incorporators, Stockholders, Members, Partners, Officers, Managers and Directors of Company or any Guarantor Exempt from Individual Liability. No recourse under or upon any obligation, covenant or agreement contained in this Indenture, or in any Security of any series or any Guarantees, or because of any indebtedness evidenced thereby, shall be had against any incorporator, as such or against any past, present or future stockholder, member, partner, officer, manager or director, as such, of the Company, any Guarantor or any successor, either directly or through the Company, any Guarantor or any successor, under any rule of law, statute or constitutional provision or by the enforcement of any assessment or by any legal or equitable proceeding or otherwise, all such liability being expressly waived and released by the acceptance of the Securities of such series by the Holders thereof and as part of the consideration for the issue of the Securities of such series.

SECTION 15.02. Provisions of Indenture for the Sole Benefit of Parties and Holders. Except as set forth in Section 15.10, nothing in this Indenture or in the Securities of any series, expressed or implied, shall give or be construed to give to any person, firm or corporation, other than the parties hereto and their successors and the Holders of the Securities of such series, any legal or equitable right, remedy or claim under this Indenture or under any covenant or provision herein contained, all such covenants and provisions being for the sole benefit of the parties hereto and their successors and of the Holders of the Securities.

SECTION 15.03. Successors and Assigns of Company or Guarantor Bound by Indenture. All the covenants, stipulations, promises and agreements in this Indenture contained by or in behalf of the Company or any Guarantor shall bind their successors and assigns, whether so expressed or not.

SECTION 15.04. Notices, Etc., to Trustee, the Company and Guarantors. Any request, demand, authorization, direction, notice, consent, waiver or act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with:

(1) the Trustee by any Holder, or by the Company or a Guarantor, if any, shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing to or with the Trustee at [□], facsimile [□], or such other facsimile number as may be provided by the Trustee from time to time, and shall be deemed to have been made at the time of actual receipt of such written notice or facsimile transmission thereof; provided that any delivery made or facsimile sent on a day other than a Business Day shall be deemed to be received on the next following Business Day; or

(2) the Company or a Guarantor, if any, by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing to the Company or such Guarantor, as the case may be, addressed to it at the address specified in Schedule I hereto or at any other address or facsimile number previously furnished in writing to the Trustee by the Company or such Guarantor, as the case may be, and shall be deemed to have been made at the time of delivery or facsimile transmission; provided that any delivery made or facsimile sent on a day other than a Business Day shall be deemed to be received on the next following Business Day.

SECTION 15.05. Notices to Holders. Where this Indenture provides for notice to Holders, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each Holder entitled thereto, at its last address as it appears in the Security Register. In any case where notice to Holders is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders. Where this Indenture provides for notice in any manner, such notice may be waived in writing by the person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. The Trustee may waive notice to it of any provision herein, and such waiver shall be deemed to be for its convenience and discretion. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

In case, by reason of the suspension of or irregularities in regular mail service, it shall be impracticable to mail notice to the Company, any Guarantor or any Holders when such notice is required to be given pursuant to any provision of this Indenture, then any manner of giving such notice as shall be satisfactory to the Trustee shall be deemed to be a sufficient giving of such notice.

SECTION 15.06. Officers' Certificates and Opinions of Counsel; Statements to Be Contained Therein. Upon any application or demand by the Company or any Guarantor to the Trustee to take any action under any of the provisions of this Indenture, the Company or such Guarantor, as the case may be, shall furnish to the Trustee an Officers' Certificate stating that all conditions precedent provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent have been complied with, except that in the case of any such application or demand as to which the furnishing of such documents is specifically required by any provision of this Indenture relating to such particular application or demand, no additional certificate or opinion need be furnished.

Each certificate or opinion provided for in this Indenture and delivered to the Trustee with respect to compliance with a condition or covenant provided for in this Indenture shall include (a) a statement that the person making such certificate or opinion has read such covenant or condition, (b) 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, (c) a statement that, in the opinion of such person, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been complied with and (d) a statement as to whether or not, in the opinion of such person, such condition or covenant has been complied with.

Any certificate, statement or opinion of an officer of the Company or any Guarantor may be based, insofar as it relates to legal matters, upon a certificate or opinion of or representations by counsel, unless such officer knows that the certificate or opinion or representations with respect to the matters upon which his or her certificate, statement or opinion may be based as aforesaid are erroneous, or in the exercise of reasonable care should know that the same are erroneous. Any certificate, statement or Opinion of Counsel may be based, insofar as it relates to factual matters or information which is in the possession of the Company, upon the certificate, statement or opinion of or representations by an officer or officers of the Company or such Guarantor, as the case may be, unless such counsel knows that the certificate, statement or opinion or representations with respect to the matters upon which his or her certificate, statement or opinion may be based as aforesaid are erroneous, or in the exercise of reasonable care should know that the same are erroneous.

Any certificate, statement or opinion of an officer or counsel of the Company or any Guarantor may be based, insofar as it relates to accounting matters, upon a certificate or opinion of or representations by an accountant or firm of accountants in the employ of the Company or such Guarantor, as the case may be, unless such officer or counsel knows that the certificate or opinion or representations with respect to the accounting matters upon which

his or her certificate, statement or opinion may be based as aforesaid are erroneous, or in the exercise of reasonable care should know that the same are erroneous.

Any certificate or opinion of any independent firm of public accountants filed with the Trustee shall contain a statement that such firm is independent within the meaning of the Securities Act and the rules and regulations promulgated thereunder.

SECTION 15.07. Payments Due on Saturdays, Sundays and Holidays. If the Stated Maturity of interest on or principal of the Securities of a particular series or the date fixed for redemption of any Security shall not be a Business Day, then payment of interest or principal with respect to such Securities need not be made on such date, but may be made on the next succeeding Business Day with the same force and effect as if made on the date of maturity or the date fixed for redemption, and no interest shall accrue for the period after such date.

SECTION 15.08. Conflict of Any Provision of Indenture with Trust Indenture Act. If and to the extent that any provision of this Indenture limits, qualifies or conflicts with another provision included in this Indenture by operation of Sections 310 to 317, inclusive, of the Trust Indenture Act (an "incorporated provision"), such incorporated provision shall control.

SECTION 15.09. Conflict of Any Provision of Securities with Indenture. If and to the extent that any provision of the Securities limits, qualifies or conflicts with a provision of this Indenture, such provision of this Indenture shall control.

SECTION 15.10. New York Law to Govern. This Indenture, the Securities of any series and the Guarantees, if any, shall each be deemed to be a contract under the laws of the State of New York, and for all purposes shall be construed in accordance with the laws of the State of New York, but without giving effect to applicable principles of conflicts of law to the extent that the application of the law of another jurisdiction would be required thereby.

SECTION 15.11. Waiver of Jury Trial. Each party hereto hereby waives, and each Holder by acceptance of its Securities shall be deemed to have waived, to the fullest extent permitted by applicable law, any right it may have to a trial by jury (but no other judicial remedies) in respect of any litigation directly or indirectly arising out of, under or in connection with this Indenture or the transactions contemplated hereby.

SECTION 15.12. Consent to Jurisdiction and Service. The Company and each Guarantor, if any, irrevocably (a) agree that any legal suit, action or proceeding against the Company or any Guarantor arising out of or based upon this Indenture, the Notes or any Guarantee or the transactions contemplated hereby may be instituted in any U.S. Federal or state court in the City and County of New York (collectively, the "Specified Courts") and (b) waive, to the fullest extent they may effectively do so, any objection which they may now or hereafter have to the laying of venue of any such proceeding. The Company and each Guarantor hereby appoint C T Corporation System, 111 Eighth Avenue, New York, New York, 10011, as their authorized agent (the "Authorized Agent") upon whom process may be served in any such action arising out of or based on this Indenture, the Securities or the transactions contemplated hereby which may be instituted in any Specified Court, expressly consent to the jurisdiction of any such Specified Court in respect of any such action, and waive any other requirements of or objections to personal jurisdiction with respect thereto. Such appointment shall be irrevocable by the Company and any Guarantors. The Company and each Guarantor represent and warrant that the Authorized Agent has agreed to act as such agent for service of process and agree to take any and all action, including the filing of any and all documents and instruments, that may be necessary to continue such appointment in full force and effect as aforesaid. Service of process upon the Authorized Agent in any manner permitted by applicable law and written notice of such service to the Company or to a Guarantor shall be deemed, in every respect, effective service of process upon the Company or such Guarantor.

SECTION 15.13. Third Party Beneficiaries. Holders of Securities of the Company are third party beneficiaries of this Indenture, and any of them (or their representative) shall have the right to enforce the provisions of this Indenture that benefit such Holders.

SECTION 15.14. 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.

SECTION 15.15. Effect of Headings, Table of Contents. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

SECTION 15.16. No Adverse Interpretation of Other Agreements. This Indenture may not be used to interpret another indenture, loan or debt agreement of the Company, any Guarantor or any Subsidiary. Any such indenture, loan or debt agreement may not be used to interpret this Indenture.

SECTION 15.17. Severability. If any provision hereof shall be held to be invalid, illegal or unenforceable under applicable law, then the remaining provisions hereof shall be construed as though such invalid, illegal or unenforceable provision were not contained herein.

SECTION 15.18. Patriot Act Compliance. The parties hereto acknowledge that in accordance with Section 326 of the USA Patriot Act the Trustee, like all financial institutions, is required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens 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 15.19. Force Majeure. In no event shall the Trustee, Registrar or Paying Agent be liable for any failure or delay in the performance of its obligations hereunder because of circumstances beyond the Trustee's, Registrar's or Paying Agents' control, including, but not limited to, acts of God, flood, war (whether declared or undeclared), terrorism, fire, riot or embargo, which delay, restrict or prohibit the providing of the services contemplated by this Indenture.

SIGNATURES

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed, all as of [•].

AXSOME THERAPEUTICS, INC.
as the Company

By:
Name:
Title:

[□]
as a Guarantor

By:
Name:
Title:

[□]
as the Trustee

By:
Name:
Title:

Schedule I

Company	Address and Facsimile Number
Axsome Therapeutics, Inc.	200 Broadway, 3rd Floor New York, New York 10038 (212) 332-3241 Attn: [⬜]
Guarantor	**Address and Facsimile Number**
[⬜]	[⬜]

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Exhibit 5.1

December 5, 2019
Axsome Therapeutics, Inc.
200 Broadway, 3rd Floor
New York, New York 10038

RE: Axsome Therapeutics, Inc. Registration Statement on Form S-3ASR

Ladies and Gentlemen:

We have acted as counsel to Axsome Therapeutics, Inc., a Delaware corporation (the "***Company***"), in connection with the filing of a registration statement on Form S-3ASR (the ***"Registration Statement***"), filed with the Securities and Exchange Commission on the date hereof, under the Securities Act of 1933, as amended (the "***Securities Act***"). The Registration Statement includes a base prospectus (the "***Prospectus***") that provides that it may be supplemented in the future by one or more supplements to the Prospectus (each, a "***Prospectus Supplement***"). The Prospectus, as it may be supplemented by one or more Prospectus Supplements, relates to the proposed offering and sale from time to time, pursuant to Rule 415 under the Securities Act, of an indeterminate aggregate amount and unspecified number of the following securities (the "***Securities***"): (i) shares of the Company's common stock, par value $0.0001 per share (the "***Common Stock***"), (ii) shares of the Company's preferred stock, $0.0001 par value per share (the "***Preferred Stock***"), (iii) debt securities of the Company (the "***Debt Securities***"), (iv) warrants to purchase shares of Common Stock, shares of Preferred Stock or Debt Securities (the "***Warrants***"), (v) units (the "***Units***") consisting of Common Stock, Preferred Stock, Debt Securities, Warrants or any combination of the foregoing, and (vi) rights (the "***Rights***") to purchase shares of Common Stock, shares of Preferred Stock, Debt Securities or Units.

In connection with this opinion letter, we have examined the Registration Statement and originals, or copies certified or otherwise identified to our satisfaction, of (i) the Amended and Restated Certificate of Incorporation of the Company (the "***Certificate***"), (ii) the Amended and Restated Bylaws of the Company (the "***Bylaws***"), (iii) the Form of Indenture (the "***Base Indenture***") by and between the Company and the trustee to be named therein (the "***Trustee***") filed as Exhibit 4.7 to the Registration Statement, (iv) certain resolutions of the Company's Board of Directors relating to the Registration Statement, and (v) such other documents, records and other instruments as we have deemed appropriate for purposes of the opinions set forth herein.

We have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of the documents submitted to us as originals, the conformity with the originals of all documents submitted to us as certified, facsimile or photostatic copies and the authenticity of the originals of all documents submitted to us as copies. With respect to matters of fact relevant to our opinions as set forth below, we have relied upon certificates of officers of the Company, representations made by the Company in documents examined by us and representations of officers of the Company. We have also obtained and relied upon such certificates and assurances from public officials as we have deemed necessary for the purposes of our opinions set forth below.

For the purpose of the opinions set forth below, we have also assumed, without independent investigation or verification, that:

A. the issuance, sale, number or amount, as the case may be, and terms of Securities to be offered from time to time will be duly authorized and established, in accordance with the Certificate, the Bylaws and applicable Delaware law (each, a "***Corporate Action***"), and will not conflict with or constitute a breach of the terms of any agreement or instrument to which the Company is subject;

B. at the time of issuance and sale of shares of Common Stock, a sufficient number of shares of Common Stock will be authorized and available for issuance and that the consideration for the issuance and sale of the Common Stock (or Preferred Stock convertible into Common Stock, Warrants exercisable for Common Stock or Rights to purchase Common Stock) will be in an amount that is not less than the par value of the Common Stock;

C. prior to the issuance of shares of one or more series of Preferred Stock, an appropriate certificate of designation relating to each such series of Preferred Stock will have been duly authorized by Corporate Action and filed with the Secretary of State of the State of Delaware and at the time of issuance and sale, a sufficient number of shares of Preferred Stock will be authorized, designated and available for issuance and that the consideration for the issuance and sale of the Preferred Stock (or Warrants exercisable for Preferred Stock or Rights to purchase Preferred Stock) will be in an amount that is not less than the par value of the Preferred Stock;

D. each series of Debt Securities will be issued under the Base Indenture and any necessary amendment or supplement thereto (collectively, the "***Indenture***") between the Company and the Trustee, and the execution, delivery and performance of the Indenture will be duly authorized by Corporate Action, and will not conflict with or constitute a breach of the terms of any agreement or instrument to which the Company is subject;

E. to the extent that the obligations of the Company under the Indenture may depend upon such matters, the Trustee will be duly organized, validly existing and in good standing under the laws of its jurisdiction of organization; that the Trustee will be duly qualified to engage in the activities contemplated by the Indenture; that the Indenture will be duly authorized, executed and delivered by the Trustee and will constitute the legal, valid and binding obligation of such Trustee, enforceable against the Trustee in accordance with its terms; that the Trustee will be in compliance, generally and with respect to acting as a trustee under the Indenture, with all applicable laws and regulations, and that the Trustee will have the requisite organizational and legal power and authority to perform its obligations under such Indenture;

F. any Warrants will be issued under one or more warrant agreements (each, a "***Warrant Agreement***") between the Company and the financial institution identified in the Warrant Agreement as a warrant agent (each, a "***Warrant Agent***") and the execution, delivery and performance of the applicable Warrant Agreement will be duly authorized by Corporate Action, and will not conflict with or constitute a breach of the terms of any agreement or instrument to which the Company is subject;

G. any Warrants offered under the Registration Statement and the related Warrant Agreement, as applicable, will be executed in the forms filed as exhibits to the Registration Statement or incorporated by reference therein;

H. to the extent that the obligations of the Company under any Warrant Agreement may depend upon such matters, each of the parties thereto other than the Company, will be duly organized, validly existing and in good standing under the laws of its jurisdiction of organization and will be duly qualified to engage in the activities contemplated by such Warrant Agreement; that such Warrant Agreement has been duly authorized, executed and delivered by such party and constitutes the legal, valid and binding obligation of such party, enforceable against such party in accordance with its terms; that such party is in compliance, generally and with respect to acting as a party with respect to its obligations under such Warrant Agreement, with all applicable laws and regulations, and that such party has the requisite organizational and legal power and authority to perform its obligations under such Warrant Agreement;

I. any Units will be issued pursuant to purchase or similar agreements to be entered into by the Company and the parties thereto (each, a "***Unit Agreement***") and the execution, delivery and performance of the applicable Unit Agreement will be duly authorized by Corporate Action, and will not conflict with or constitute a breach of the terms of any agreement or instrument to which the Company is subject;

J. to the extent that the obligations of the Company under any Unit Agreement may depend upon such matters, each of the parties thereto other than the Company, will be duly organized, validly existing and in good standing under the laws of its jurisdiction of organization and will be duly qualified to engage in the activities contemplated by such Unit Agreement; that such Unit Agreement has been duly authorized, executed and delivered by such party and constitutes the legal, valid and binding obligation of such party, enforceable against such party in accordance with its terms; that such party is in compliance, generally and with respect to acting as a party with respect to its obligations under such Unit Agreement, with all applicable laws and regulations, and that such party has the requisite organizational and legal power and authority to perform its obligations under such Unit Agreement;

K. any Units offered under the Registration Statement and the related purchase or similar agreement, as applicable, will be executed in the forms filed as exhibits to the Registration Statement or incorporated by reference therein;

L. any Rights will be issued pursuant to rights agreements (each such rights agreement, a "***Rights Agreement***") to be entered into by the Company and a rights agent (each, a "***Rights Agent***") and the execution, delivery and performance of the applicable Warrant Agreement will be duly authorized by Corporate Action, and will not conflict with or constitute a breach of the terms of any agreement or instrument to which the Company is subject;

M. to the extent that the obligations of the Company under any Rights Agreement may depend upon such matters, each of the parties thereto other than the Company, will be duly organized, validly existing and in good standing under the laws of its jurisdiction of organization and will be duly qualified to engage in the activities contemplated by such Rights Agreement; that such Rights Agreement has been duly authorized, executed and delivered by such party and constitutes the legal, valid and binding obligation of such party, enforceable against such party in accordance with its terms; that such party is in compliance, generally and with respect to acting as a party with respect to its obligations under such Rights Agreement, with all applicable laws and regulations, and that such party has the requisite organizational and legal power and authority to perform its obligations under such Rights Agreement;

N. any Rights offered under the Registration Statement and the related Rights Agreement, as applicable, will be executed in the forms filed as exhibits to the Registration Statement or incorporated by reference therein;

O. the Registration Statement and any amendments thereto (including post-effective amendments) will have become effective and such effectiveness shall not have been terminated or rescinded and will comply with all applicable federal and state laws at the time the Securities are offered and issued as contemplated by the Registration Statement;

P. a Prospectus Supplement will have been prepared, delivered (including through compliance with Rule 172 of the General Rules and Regulations promulgated under the Act) and filed with the Commission describing the Securities offered thereby and will comply with all applicable laws at the time the Securities are offered and issued as contemplated by the Registration Statement;

Q. all Securities will be issued and sold in compliance with applicable federal and state securities laws; and

R. a definitive purchase, underwriting or similar agreement (each, a "***Definitive Agreement***") with respect to any Securities offered or issued will have been duly authorized and validly executed and delivered by the Company and the other parties thereto.

Subject to the foregoing and the other matters set forth herein, it is our opinion that, as of the date hereof:

1. Upon due authorization by Corporate Action of the issuance and sale of shares of Common Stock and upon issuance and delivery of such shares of Common Stock against payment for such shares (in an amount at least equal to the aggregate par value of such shares of Common Stock) in accordance with the terms and provisions of the applicable Definitive Agreements, the terms of the Corporate Action and as contemplated by the Registration Statement and the applicable Prospectus Supplement, and, if applicable, upon the conversion, exchange or exercise of any other Securities in accordance with their respective terms, the terms of the Corporate Action and as contemplated by the Registration Statement and the applicable Prospectus Supplement (which shall, in each case, provide for payment of consideration that shall be at least equal to the aggregate par value of such shares of Common Stock), such shares of Common Stock will be validly issued, fully paid and nonassessable.

2. Upon due authorization by Corporate Action of the issuance and sale of shares of a series of Preferred Stock and upon issuance and delivery of such shares of Preferred Stock against payment for such shares (in an amount at least equal to the aggregate par value of such shares of Preferred Stock) in accordance with the terms and provisions of applicable Definitive Agreements, the terms of the Corporate Action and as contemplated by the Registration Statement and the applicable Prospectus Supplement, and, if applicable, upon the conversion, exchange or exercise of any other Securities in accordance with their respective terms, the terms of the Corporate Action and as contemplated by the Registration Statement and the applicable Prospectus Supplement (which shall, in either case, provide for payment of consideration at least equal to the aggregate par value of such shares of Preferred Stock), such shares of such series of Preferred Stock will be validly issued, fully paid and nonassessable.

3. When the Indenture has been qualified under the Trust Indenture Act of 1939, as amended, the particular series of Debt Securities has been duly established in accordance with the terms of the applicable Indenture, the specific terms of a particular issuance of Debt Securities have been duly authorized by Corporate Action and are in accordance with the terms of the Indenture, the Indenture is duly executed and delivered by the Company, and such Debt Securities have been duly executed, authenticated, completed, issued and delivered, against payment for such Debt Securities, in accordance with the terms and provisions of the applicable Definitive Agreements, the terms of the Corporate Action and as contemplated by the Registration Statement and the applicable Prospectus Supplement, and, if applicable, upon the conversion, exchange or exercise of any other Securities in accordance with their respective terms, the terms of the Corporate Action and as contemplated by the Registration Statement and the applicable Prospectus Supplement, such Debt Securities will be validly issued and will constitute valid and binding obligations of the Company, and the Indenture will constitute a valid and binding obligation of the Company, except, with respect to each of the Debt Securities and the Indenture, as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

4. When a Warrant Agreement providing for the specific terms of a particular issuance of Warrants has been duly authorized by Corporate Action and has been duly executed and delivered by the Company and the Warrant Agent named in such Warrant Agreement and such Warrants, conforming to the requirements of such Warrant Agreement, have been duly countersigned or authenticated, as required, by such Warrant Agent and duly executed and delivered by the Company against payment for such Warrants in accordance with the terms and provisions of such Warrant Agreement and applicable Definitive Agreements, the terms of the Corporate Action and as contemplated by the Registration Statement and the applicable Prospectus Supplement, such Warrants will be valid and binding obligations of the Company, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

5. When a Unit Agreement providing for the specific terms of a particular issuance of Unit has been duly authorized by Corporate Action and has been duly executed and delivered by the Company and the other parties named in such Unit Agreement and such Units, conforming to the requirements of such Unit Agreement, have been duly executed and delivered by the Company against payment for such Units in accordance with the terms and provisions of such Unit Agreement and applicable Definitive Agreements, the terms of the Corporate Action and as contemplated by the Registration Statement and the applicable Prospectus Supplement, such Units will be valid and binding obligations of the Company, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

6. When a Rights Agreement providing for the specific terms of a particular issuance of Rights has been duly authorized by Corporate Action and has been duly executed and delivered by the Company and the Rights Agent named in such Rights Agreement and such Rights, conforming to the requirements of such Rights Agreement, have been duly countersigned or authenticated, as required, by such Rights Agent and duly executed and delivered by the Company against payment for such Rights in accordance with the terms and provisions of such Rights Agreement and applicable Definitive Agreements, the terms of the Corporate Action and as contemplated by the Registration Statement and the applicable Prospectus Supplement, such Rights will be valid and binding obligations of the Company, except as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, arrangement, moratorium or other similar laws affecting creditors' rights, and subject to general equity principles and to limitations on availability of equitable relief, including specific performance.

The foregoing opinions are limited to the General Corporation Law of the State of Delaware and, with respect to our opinion in paragraph 3 above, the State of New York, and we express no opinion with respect to the laws of any other state or jurisdiction. Although the Securities may be issued from time to time on a delayed or continuous basis, the opinions expressed herein are limited to the laws, including rules and regulations, as in effect on the date hereof.

The opinion letter is limited to the matters stated herein and no opinions may be implied or inferred beyond that matters expressly stated herein. The opinions expressed herein are as of the date hereof and we assume no obligation to update or supplement such opinions to reflect any facts or circumstances that may hereafter come to our attention or any changes in the law that may hereafter occur.

We consent to your filing this opinion as Exhibit 5.1 to the Registration Statement and to the reference to our firm under the caption “Legal Matters” in the Prospectus. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Securities Act or the rules or regulations of the Securities and Exchange Commission thereunder.

Very truly yours,

/s/ DLA Piper LLP (US)

Exhibit 5.2

December 5, 2019
Axsome Therapeutics, Inc.
200 Broadway, 3rd Floor
New York, New York 10038

RE: Securities Registered under Registration Statement on Form S-3ASR

Ladies and Gentlemen:

We have acted as counsel to Axsome Therapeutics, Inc., a Delaware corporation (the "Company") in connection with the filing of its Registration Statement on Form S-3ASR (as amended or supplemented, the "Registration Statement") filed on December 5, 2019 with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Act"), relating to the registration of the offering by the Company of any combination of securities of the types specified therein. We are delivering this supplemental opinion letter in connection with the sales agreement prospectus (the "Prospectus") contained in the Registration Statement. The Prospectus relates to the issuance and sale, from time to time, by the Company of up to $80.0 million of shares of the Company's common stock (the "Shares"), par value $0.0001 per share ("Common Stock"), covered by the Registration Statement, and in addition, in accordance with Section 7(d)(d) of the Sales Agreement (as defined below), the Company may in the future register certain additional Rollover Shares (as defined in the Sales Agreement) by filing an additional prospectus supplement to the Registration Statement (the "Rollover Shares" and together with the Shares, the "Placement Shares"). The Shares are being offered and sold pursuant to the Prospectus and the sales agreement dated December 5, 2019, by and between the Company and SVB Leerink LLC, as sales agent (the "Sales Agreement"), and the Rollover Shares, if and when registered, will also be sold in accordance with the Sales Agreement and a separate prospectus supplement to the Registration Statement.

In connection with this opinion letter, we have examined the Registration Statement, the Prospectus, the Sales Agreement, and originals, or copies certified or otherwise identified to our satisfaction, of the Amended and Restated Certificate of Incorporation and the Amended and Restated Bylaws of the Company, and such other documents, records and other instruments as we have deemed appropriate for purposes of the opinion set forth herein.

We have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of the documents submitted to us as originals, the conformity with the originals of all documents submitted to us as certified, facsimile or photostatic copies and the authenticity of the originals of all documents submitted to us as copies.

Based upon the foregoing, we are of the opinion that the Placement Shares have been duly authorized by the Company and, when issued and sold by the Company and delivered by the Company against receipt of the purchase price therefor, in the manner contemplated by the Sales Agreement, will be validly issued, fully paid and non-assessable.

The opinions expressed herein are limited to the Delaware General Corporation Law.

We hereby consent to the use of this opinion as Exhibit 5.2 to the Registration Statement and to the reference to us under the caption "Legal Matters" in the Prospectus Supplement. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Act or the rules or regulations of the SEC thereunder.

Very truly yours,

/s/ DLA Piper LLP (US)

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Axsome Therapeutics, Inc. for the registration of its common stock, preferred stock, warrants, debt securities, units and rights to purchase common stock, preferred stock, debt securities or units and to the incorporation by reference therein of our report dated March 14, 2019, with respect to the consolidated financial statements of Axsome Therapeutics, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2018, filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP
New York, New York
December 5, 2019